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A PARALELL OF ARCHITECTURE BOTH ANCIENT & MODERNE

BY ROLAND FREART. S^r. DE CHAMBRAY

A

PARALLEL

OF THE

Antient Architecture

WITH THE

MODERN,

In a Collection of *Ten* Principal *Authors* who have Written upon the FIVE ORDERS,

VIZ.

PALLADIO and SCAMOZZI, SERLIO and VIGNOLA, D. BARBARO and CATANEO, } { L. B. ALBERTI and VIOLA, BULLANT and DE LORME, Compared with one another.

The Three *Greek Orders*, DORICK, IONICK, and CORINTHIAN, comprise the *First Part* of this *Treatise*.
And the two *Latin*, TUSCAN and COMPOSITA, the *Latter*.

Written in *French* by *ROLAND FREART*, *Sieur de Chambray*.
Made *English* for the Benefit of BUILDERS.

To which is added, An *Account* of ARCHITECTS and ARCHITECTURE, in an *Historical* and *Etymological* Explanation of certain *Terms* particularly affected by *Architects*.
With *LEON BAPTISTA ALBERTI*'s Treatise of STATUES.

By *JOHN EVELYN*, Esq; Fellow of the ROYAL SOCIETY.

The Third Edition, *with the Addition of* THE ELEMENTS OF ARCHITECTURE; *Collected by Sir* HENRY WOTTON *Knt. from the best Authors and Examples; and also other large Additions.*

LONDON:

Printed by *T. W.* for D. BROWNE, J. WALTHOE, B. and S. TOOKE, D. MIDWINTER, W. MEARS, and F. CLAY. MDCC XXIII.

A

PARALLEL

OF THE

Ancient Architecture

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In a Collection of Ten Principal Authors who have Written upon the Five ORDERS,

&c.

THE ANCIENT and MODERN

EXAMPLES, Compared with one another.

The Three Greek Orders, DORICK, IONICK, and CORINTHIAN, compared the Proportions of this Treatise.

And the two Latin, TUSCAN and COMPOSITA, the Latter.

TO THE

Moſt Serene MAJESTY

OF

CHARLES II.

SINCE the Great *Auguſtus* vouchſafed to Patronize a *Work* of this Nature, which was Dedicated to him by *Vitruvius*; I had no reaſon to apprehend, Your *Majeſty* would reprove theſe *Addreſſes* of mine, if, in preſenting You with thoſe *Antiquities* on which that Excellent *Maſter* form'd his *Studies*, I intituled Your *Majeſty* to a *Work*, ſo little inferiour to it, and ſo worthy to go in paragon with it. And, indeed, to whom could I more aptly *Inſcribe* a *Diſcourſe* of *Building*, than to ſo *Royal* a *Builder*, whoſe Auguſt Attempts have already

ready given ſo great a *Splendor* to our Imperial *City*, and ſo Illuſtrious an *Example* to the *Nation!* It is from this Contemplation, *Sir*, that after I had (by the Commands of the *Royal Society*) endeavour'd the Improvement of *Timber*, and the Planting of *Trees*, I have advanc'd to that of *Building*, as its proper and natural Conſequent: Not with a Preſumption to Incite or Inſtruct Your *Majeſty*, which were a Vanity unpardonable; but by it to take occaſion of celebrating Your *Majeſty*'s great *Example*, who uſe Your *Empire* and *Authority* ſo worthily, as *Fortune* ſeems to have conſulted her *Reaſon* when ſhe poured her *Favours* upon You; ſo as I never caſt my Eyes on that generous *Deſignation* in the *Epigram*,

——*Ut donem; Paſtor, & Ædificem,*

Credis ab hoc me Paſtor opes fortaſſe rogare
Propter quod vulgus, craſſaque turba rogat? &c.
Eſt nihil exiſtis: Superos, aſſidera teſtor.
Ergo quid? Ut donem, Paſtor, & Ædificem.
MART. *Ep. Lib.* IX.

without immediate Reflections on your *Majeſty*, who ſeems only to value thoſe Royal Advantages You have above others, but *that You may Oblige, and that You may Build.* And certainly, *Sir*, Your *Majeſty* has conſulted the Nobleſt Way of Eſtabliſhing Your *Greatneſs*, and of Perpetuating Your *Memory*; ſince, whilſt *Stones* can preſerve *Inſcriptions*, Your *Name* will be famous to *Poſterity*; and when thoſe Materials fail, the *Benefits* that are engraven in our *Hearts*, will outlaſt thoſe of *Marble*. It would be no *Paradox*, but a *Truth*, to affirm, That Your *Majeſty* has already *Built* and *Repair'd* more in *three* or *four* Years (notwithſtanding the Difficulties, and the Neceſſity of an extraordinary *Oeconomy* for the Publick Concernment) than all Your *Enemies* have *Deſtroy*'d in *Twenty*, nay, than all Your *Majeſty*'s Predeceſſors have *Advanc'd* in an *Hundred*; as I could eaſily make out, not only by what Your *Majeſty* has ſo magnificently deſign'd and carried on at that Your ancient *Honour* of *Greenwich*, under the Conduct of Your moſt Induſtrious and Worthy *Surveyor*; but in thoſe ſplendid Apartments, and other uſeful Reformations for *Security* and *Delight*, about Your *Majeſty*'s Palace at *White-Hall*; the chargeable

chargeable *Covering*, firſt *Paving* and *Reformation* of *Weſtminſter-Hall*; Care and Preparation for St. *Paul*'s, by the Impiety and Iniquity of the late Confuſions almoſt *Dilapidated*: With what Her *Majeſty* the *Queen-Mother* has added to her *Palace* at *Somerſet-Houſe*, in a *Structure* becoming her Royal Grandeur, and the due Veneration of all Your *Majeſty*'s, Subjects for the Honour *She* has done both this Your Native *City* and the whole *Nation*. Nor may I here omit (what I ſo much deſire to tranſmit to *Poſterity*) thoſe noble and profitable *Amænities* of Your *Majeſty*'s *Plantations*, wherein You moſt reſemble the *Divine Architect*; becauſe Your *Majeſty* has propoſed in it ſuch a *Pattern* to Your *Subjects*, as merit their Imitation and profoundeſt Acknowledgments, in one of the moſt Worthy and Kingly *Improvements* that *Nature* is capable of. I know not what they talk of former *Ages*, and of the now contemporary *Princes* with Your *Majeſty*; theſe Things are *viſible*: and ſhould I here deſcend to more Particulars, which yet were not foreign to the *Subject* of this *Diſcourſe*, I would provoke the whole World to produce me an *Example* parallel with Your *Majeſty*, for Your exact Judgment, and marvellous Ability in all that belongs to the *Naval Architecture*, both as to its proper *Terms*, and more ſolid *Uſe*; in which Your *Majeſty* is *Maſter* of one of the moſt noble and profitable *Arts* that can be wiſhed in a *Prince*, to whom *God* has deſigned the *Dominion* of the Ocean, which renders Your *Majeſty*'s *Empire Univerſal*; when by exerciſing Your Royal Talent and Knowledge that Way, You can bring even the *Antipodes* to meet, and the Poles to kiſs each other; for ſo likewiſe (not in a *metaphorical*, but *natural* Senſe) Your equal and prudent *Government* of this *Nation* has made it good, whilſt Your *Majeſty* has ſo proſperouſly guided this giddy *Bark* through ſuch a *Storm*, as no Hand, ſave Your *Majeſty*'s, could touch the *Helm*, but at the Price of their Temerity. But to return to that of *Architecture* again (for it is hard not to ſlide into the *Panegyrick*, when once one begins to ſpeak of Your *Majeſty*)

jesty) I am Witness not only how pertinently You *discourse* of the *Art*, but how judiciously You *contrive*: and as in all other Princely and Magnificent Things, Your *Notices* are extraordinary, so I cannot but augure of their *Effects*, and that Your *Majesty* was designed of *God* for a Blessing to this *Nation* in all that can render it happy, if we can have the Grace but to discern it, and be thankful for it.

This is, *Sir*, the glorious *Idea* which I have conceiv'd of Your *Serene Majesty*, and which I propose for as emulous an *Example* as any *Age* has hitherto produc'd; nor can there any thing be added more, but that Permanency, which the rest of Your *Virtues* do promise us. If such were those Glorious *Heroes* of Old, who first brought Men out of *Wildernesses* into walled and well-built *Cities*, that chased *Barbarity*, introduced *Civility*, gave *Laws* to *Republicks*, and to whose rare *Examples* and *Industry* we are accountable for all that we possess of *useful* in the *Arts*, and that we enjoy of *Benefit* to the *Publick*; How much Cause have We in these *Nations* to rejoice, that whilst Your *Majesty* pursues these laudable *Undertakings*, that *Race* of *Demy-Gods* is not altogether extinct! And if after the Support of *Religion*, and the Establishment of *Laws*, the Perfection of *Sciences* be the next in order to the Well-being of a State, *This* of *Architecture* (as one of the most *beneficial* and *useful* to *Mankind*) owes her *Renascency* amongst *Us* to Your *Majesty*'s Encouragements, and to as many of those *Illustrious* Persons, as by their large and magnificent *Structures* transcribe Your Royal *Example*; in particular, my *Lord* High *Chancellor* of *England*, my *Lord* High *Treasurer*, and my *Lord* the *Earl* of *St. Albans*, whose *Memories* deserve this Consecration.

I have now but *one* thing more to speak, *Sir*, and that is for the *Reputation* of the *Piece* I present to Your *Serene Majesty*: It is indeed a *Translation*; but it is withal the *Marrow* and very *Substance* of no less than *Ten* judicious *Authors*, and

of

of almoſt *twice* as many the moſt Noble *Antiquities* now extant upon the Boſom of the *Earth:* 'twere elſe a difficult Province to conceive how one ſhould entertain Your *Majeſty* without a *Spirit* and a *Subject* worthy Your Application. There is ſomething yet of *Addition* to it, which is *New*, and of mine own, the Defects whereof do ſupplicate Your *Majeſty*'s Pardon; to ſay nothing of the Difficulty of rendring a *Work* of this *Nature* intelligible to the *Vulgar*, and not unworthy the *Stile* of a *Gentleman*; ſeeing it is not the Talent of every one who underſtands a *Language*, unleſs he alſo underſtand the Art. But theſe may ſeem to defer to my own Glory, which is conſpicuous in nothing ſo much, as in laying it at Your *Majeſty*'s Feet, and the Permiſſion of that *Sacred Name* to protect,

Says-Court,
20 Aug. 1664.

SIR,

Your Majeſty's ever Loyal,

Moſt Obedient, and

Faithful Subject,

J. EVELYN.

TO
Sir JOHN DENHAM,
KNIGHT,
OF THE
Honourable ORDER *of the* BATH.
Superintendant and Surveyor of his Majesty's
BUILDINGS and WORKS.

SIR,

IT is now some Ten *Years since, that to gratify a* Friend *of mine in the* Country, *I began to interpret this* Parallel; *(which I think I first brought out of* France*) but other things intervented, it was laid aside, and had so continued without Thoughts of Reassumption, had not the Passion of my Worthy Friend, Mr.* Hugh May, *to oblige the* Publick, *and in Commiseration of the few Assistances which our* Workmen *have of this Nature (compared to what are extant in other Countries) found out an Expedient, and by procuring a most accurate* Edition *of the* Plates, *encourage me to finish what I had begun; and to make a willing* Present *of my* Labour, *and of whatever else I was able to contribute to so generous a Design.*

The EPISTLE

Sir, I am not to inſtruct you in the Merits and Uſe of this excellent Piece ; *but it is from your Approbation and particular Influence, that our* Workmen *ought to eſteem it ; and believe me too when I affirm it, that the Ten* Authors *in this* Aſſembly, *which compoſe both ſo many, and (for not being vulgar) unintelligible* Volumes, *will neither afford them ſo full Inſtructions in the* Art, *nor ſo well enable them to judge and pronounce concerning the true* Rules *and* Maxims *of it as this one* little, *but incomparable* Collection. *You well know, that all the Miſchiefs and Abſurdities in the modern* Structures *proceed chiefly from our buſie and* Gothick *Triflings in the* Compoſitions *of the* Five Orders ; *and that an able* Workman, *who is* Maſter *of his* Art, *and has a true Reliſh indeed, carries on all his Undertakings with Applauſe and Satisfaction : That there is not in the whole* Catalogue *of* Authors *who have written on this Subject, a more ſafe, expedite and perfect Guide than this* Parallel ; *where, from the nobleſt* Remains *of* Antiquity *accurately meaſur'd,* and *perſpicuouſly* demonſtrated, *the* Rules *are laid down ; and from a ſolid, judicious, and mature Compariſon of* Modern Examples, *their* Errors *are detected ; ſo that were but a little more Pains taken by our young* Architects *and their* Subſidiaries, *about the eaſier* Principles *of* Geometry, *the* Rudiments *of* Perſpective, *and a ready Addreſs of well* Deſigning, *we might by the Converſation of this* Author *alone, promiſe our* Country, *and the* Age *to come, a miraculous Improvement of their* Buildings *in a ſhort time. Nor would this be in the leaſt to the Augmentation of their* Expences ; *ſince there is nothing coſts dearer, and diſpleaſes more, than our undigeſted Contrivances, and thoſe intollerable Defects which we have enumerated. It is from the* Aſymmetry *of our* Buildings, *want of* Decorum *and Proportion in our* Houſes, *that the Irregularity of our* Humours *and* Affections *may be ſhrewdly diſcerned : But it is from his* Majeſty's *great* Genius, *and the Choice he has made of ſuch an* Inſtrument, *that we may hope to ſee it all reformed, it being in ſo worthy an Imitation of that magnificent* Emperor, *that touch'd with the like Indignation at the* Encroachments *and* Deformities *of*

the publick Edifices *and* Ways, *cauſed a like* Reformation *alſo; ſo as we may now affirm of* London, *as the* Poet *once of* Rome,

Nunc *Roma* eſt, nuper magna taberna fuit.

Abſtulerat totam temerarius inſtitor urbem,
Inque ſuo nullum limine limen erat.
Juſſiſti tenues Germanice, *creſcere vicos;*
Et modo quæ fuerat ſemita, facta via eſt.
Nulla catenatis pila eſt præcincta lagenis;
Nec Prætor *medio cogitur ire luto.*
Stringitur in denſa nec cæca novacula turba,
Occupat aut totas nigra popina vias.
Tonſor, Caupo, Coquus, Lanius ſua limina ſervant.
Nunc Roma *eſt, nuper magna taburna fuit.*

MART. *Lib.* ☽. *Epig.* 60.

The Particulars of that Reformation in Rome, *ſo much reſembling what His* Majeſty *has commanded for the Cleanſing and Enlarging the* Streets, *the Demolition of* Bulks *and other* Obſtacles, *that the whole* Epigram *merits the Application.*

that it now begins to have the Face of a City *indeed. And truly it is an Improvement ſo extraordinary, which it has received ſince his* Majeſty's *gracious Influence upon it, that ſhould I have been ſilent in his* Praiſes, *I might juſtly apprehend* mox lapides clamaturos, *that the very* Stones *would cry out and become vocal. But neither here muſt I forget what is alone due to you,* Sir, *for the Reformation of a Thouſand Deformities in the* Streets; *as by your introducing that incomparable Form of* Paving, *to an incredible Advantage of the* Publick; *when that which is begun in* Holborn *ſhall become univerſal, for the ſaving of* Wheels *and* Carriages, *the Cure of noyſome* Gutters, *the* Deſtruction *of* Encounters, *the* Diſpatch *of* Buſineſs, *the* Cleanneſs *of the* Way, *the* Beauty *of the* Object, *the* Eaſe *of the* Infirm, *and the* preſerving *of both the* Mother *and the* Babe; *ſo many of the* Fair Sex *and their* Off-ſpring *having* periſhed *by* Miſchances *(as I am credibly inform'd) from the Ruggedneſs of the unequal* Streets, *&c.*

Note, That theſe *Directions* were Printed two Years before the *Conflagration.*

But I know not, Sir, *how theſe* Inſtances *may be reliſhed and valued amongſt the* Vulgar, *nor am I much ſollicitous; ſure I am, that* more *has been done for the* Ornament *and* Benefit *of the* Publick *in* two Years *Time, that your* Self, *with the* Commiſſioners *who undertook the* Inſpection, *have acted, than in* Five hundred *before: They were not a fooliſh or impolitick* People,

The EPISTLE

People, *who from the very* Principles *of* Humanity, *deſtin'd for the Eaſe of their* Subjects *ſo many ſpacious* Ways, *cool* Fountains, *ſhady* Walks, *refreſhing* Gardens, *and Places of publick* Recreation, *as well as ſtately* Temples, *and* Courts *of* Juſtice, *that* Religion *and the* Laws *might be publiſhed with the more* Pomp *and* Veneration: *And if his* Majeſty, *with your Pains and Induſtry, hath contributed to* ſomething *of* all *this, it is* that *for which the whole* Nation *becomes obliged; as the promoting of ſuch* publick *and* uſeful *Works (and eſpecially that of* Building,) *a certain Indication of a* prudent Government, *of a* flouriſhing *and* happy People: *So that if there remain but* one Thing *more to be deſired in order to the* Conſummation *of its perfect* Felicity, *how infinitely were it to be* wiſhed, *that whilſt the* Beauty *and* Benefit *of the* City *increaſed in* one *part, the* Deformity *and apparent* Ruin *of it might ceaſe on the* other: *But this we are to hope for, when, to bring this* monſtrous Body *into Shape, and ſcatter theſe ungovernable* Enormities, *either the* Reſtraint *of Building* irregularly *ſhall poliſh the* Suburbs, *or (which I rather could wiſh) ſome* royal Purchaſe *contract and demoliſh them. But,* Sir, *I have done, and I know you will pardon this* Zeal, *and accept of this Expreſſion of my profound Reſpects, from,*

SIR,

Your moſt humble Servant,

J. EVELYN.

To my moſt Dear BROTHERS,

JOHN FREART, Eſq;

SIEUR De CHANTELOU,

Counſellor to the KING, and Provincial Commiſſary in *Champagne*, *Alſatia*, *Lorrain*, and *Germany*.

AND

PAUL FREART, Eſq;

SIEUR De CHANTELOU,

Counſellor and Maſter of the Houſhold in Ordinary to the KING.

My Deareſt Brothers,

IT is by your Commands, that I have finiſhed this Treatiſe of the *Antient Architecture* compar'd with the *Modern*, which I had altogether laid aſide, and even effac'd out of Mind ſince the Deceaſe of *Monſeigneur De Noyers*, to whom I had devoted it, as to the *Mecænas* of the Age; and more particularly, for being indeed the true Author of this Book; ſince I had never taken it in Hand, but by his ſpecial Order, and to afford him ſome little Entertainment during his Solitude of *Dangu*, where he was pleaſed, and indeed deſired, I ſhould follow him after his Retreat from the Court, there to enjoy with him that Sweetneſs and Tranquility of Life, which we were never before acquainted with during the

time of his being Minister of State. But this blessed Leisure, which you so often congratulated, was quickly interrupted by I know not what unlucky Genius, and by an intempestive and precipitous Death, which soon extinguish'd this glorious Light of Vertue. In this great Loss (which was, my dear Brothers, common to us all, since we all had the Honour to be related to him both by our Services and Birth) I only had the Affliction to be present at the lugubrous Object, and to behold it with mine Eyes. This has often caus'd me seriously to reflect upon the Vanity and Volubility of the Fortunes of the Court, of which I am now sufficiently disabus'd: For considering that so rare a Personage, the greatest Minister, the most Disinteressed, most Laborious, most Successful, of so extraordinary and approv'd a Probity, so universal in all Sorts of excellent Qualities, and, in a word, so extraordinary, after twenty Years Service and Employment in the greatest Offices of State, that a Subject (I say) of so great Merit, should come to conclude his Days in the Country like an Exile: I confess, my dearest Brothers, whilst I think of this, all Things appear so transitory and uncertain in Greatness, that I find the Retreat of the Disgrac'd (provided they are honest Men) infinitely preferable to their Favour. Could Merit and considerable Services have for ever fix'd and establish'd a Man at Court, or been a Rampart against that Envy and Jealousy, which are the immortal Enemies and Pests of Vertue, unhappily reigning in that Climate, the late *Monseigneur de Noyers* was the most worthy to have finish'd his Days gloriously in his high Employments; since he alone perform'd more in less than Ten Years space, than all his Predecessors together had done in an Hundred; whether we have regard to Works which are necessary for the Conservation and Good of the State, or consider Those only which gave Splendour and Magnificence to the Kingdom. It is not my Design to repeat them here for your Instruction, because you know them much better than my self; only that I may leave some Memorials to the Publick, I shall mention a few of them. It may be affirm'd in general, that he had in his time exalted the noblest Arts to the supreamest Degree of Perfection that was ever seen in *France*: As *Architecture* both Civil and Military, *Painting*, *Sculpture*, and *Printing*, which he then made truly Royal, when he lodg'd it at the *Louvre*; the very first Production whereof, were not only unparallel'd Master-pieces, but, as one may say, Libraries compleat; for in two Years there were published threescore and ten great Volumes, in *Greek*, *Latin*, *French* and *Italian*; from one part of which one may judge of the rest, *viz.* that general Collection of all the *Councils*, set forth in seven and thirty Volumes, which is certainly the most Noble, most Useful, and Royal Work that ever saw Light to this Hour. This incomparable Stamp was accompany'd with another very rich one, I mean the new Money, which *Monseigneur de Noyers* plac'd also in the same Appartment of the *Louvre*, that he might allie together two of the most universal and most permanent Monuments of *Kings*, spreading themselves over all Nations, and remaining for so many Successions of Ages. The excessive Abuses which were found in the Years 1638, and 1639, both in the Title and Weight of the greatest part of the Moneys, as well of this Kingdom as of others, which had al-

moſt all of them been chang'd or disfigur'd, ſtood in need of this excellent Man to reform them, whoſe Affection and Zeal to the Publick might produce ſo extraordinary Effects. But as it was impoſſible to remedy it on the ſudden, without putting Commerce into very great Diſorder, he, from the ill Courſe of thoſe Moneys, which for ſome time they were forced to connive at, well knew how to derive the greateſt Advantages of State, and moſt ſignal Honour to the King. And in effect, 'twas none of the leaſt Pieces of Politicks, to permit and even authoriſe this Abuſe by an Edict, which could not elſe have been ſo eaſily oppos'd; whilſt in the mean time, it invited the People of the neigbouring States, in hopes of Gain, to tranſport into *France* all the light Gold and Silver which they had, and which remained there by reaſon of its being decry'd a few Months after, bearing now the Arms of *France*, with the Name and Effigies of *Louis le Juſte*, by that noble Converſion which he order'd to be made of it. Whilſt this ſtrange *Matter* was united to ours, he ſought out and diſcovered prompt and eaſie Expedients of giving it that excellent Form, which it now bears; curing at the ſame Inſtant, and by the ſame Remedy, both the preſent Inconvenience, and that to come. Thus we ſee, that its juſt and equal Roundneſs, the *Grenetis*, or Graining, which is about it, and the Poliure, which is on the Flat of every Piece, not only defends it from the Clipping, the File, and Operation of Strong-Waters; but even renders its Imitation in a manner impoſſible to our falſe Coiners; ſo as one may affirm of this Money, that it is the moſt artiſtly contriv'd, and the moſt commodious that ever was uſed in Commerce. He cauſed to be coined in leſs than four Years above an hundred and twenty Millions, and that after fifteen or ſixteen Years, that the War had laſted, and the State ſeem'd to have been utterly exhauſted by the great and continual Expences, which were inceſſantly made, laid out in fortifying of Places, paying of Armies, and the Aſſiſtance of the Allies of the Crown; at the ſame time was the *Louvre* ſeen to augment, and the Royal Houſe of *Fontainebleau*, which owe not only a part of their Ornaments to the Care of this great Miniſter, but their Conſervation alſo, and abſolute Reſtauration; ſince, but for him, they had been at preſent but one vaſt Ruine, a very Carcaſs of Building, deſolate and uninhabitable. The Caſtles of St. *Germains* and *Verſailles*, which were then the ordinary Reſidence and Delices of the King, carry on them ſome Marks of the ſame Hand: The firſt by the Conſtruction of the nobleſt Stables and Manege which is in *France*, with divers other Accommodations neceſſary for the lodging of a Royal Court; and the other, by a *Terraſſe de Greſſerie*, which is of the kind an incomparable Work, with a Circle of an hundred and twenty Yards Diameter. But whilſt he thus Worthily acquitted himſelf in the Charge of Superintendent of the Royal Houſes and Buildings of *France* (with which the King was pleaſed to gratifie him for four or five Years) he employed in the mean time his chiefeſt Cares for the Saftey and Englargement of the Kingdom, diſpencing all neceſſary Orders for the Armies both of Sea and Land; providing and furniſhing the Magazines and Garriſons of Places, and a good part of the Provinces: But as Things uſeful and neceſſary are to be preferr'd before Splendor and Magnificence,

he

he first began with *Military Architecture*, which he caus'd to march before the Civil: All our Frontiers are full of his Works: In *Picardy*, the *Port-Royal* of *Calais*, compos'd of two of the greatest Bastions of *Massonry*, the most regular and noble that are in *Europe*: All the Fortifications of *Ardes*; most of the Bastions of *Peronne*, of *S. Quentin*, of *Han*, of *La Fere*, *Dourlans*, *Amiens*, and of *Montreuil*, especially an Horn-Work also of *Massonry* of extraordinary Beauty and Magnitude; not to omit that Half-Moon of *Abbeville*, where the Inhabitants not prevailing with him to have his Arms set on it, in Acknowledgement of the Favour which they had by this Means received (permitting it in no Place built by him, from a particular Sentiment of Honour to the King, and out of a most singular Modesty) planted two Rows of Wallnut-Trees, that under that Pretext they might call it by his Name. In *Champagne*, the Fortress of *Mount Olympus*, which serves *Charleville* for a Citadel; several other Works at *Stenay*, at *Mezieres*, *Mozon*, and *Rocroy*. Then, in *Lorrain*, the Citadel of *Nancy*; the Places *de Vic*, *Moyenvic*, and *Marsal*. In *Normandy*, *Havre de Grace*; where (besides the Fortifications of the Place) he excavated a large Basin of Masons Work in the Port, near two hundred Yards long, and above sixscore wide, to contain Vessels always afloat: Also at *Bourage* in the Isles of *Xanctong*, which are two Maritime Keys of the Kingdom. In *Italy*, *Pignerol*, and all the new Fortifications of *Cazal*. Now for Works and Curiosities of *Painting* and *Sculpture* (which are as 'twere the two Sisters of the Art I am now to treat of) it would require a large Discourse to particularize them one after another; besides that, one could not well do it, without a little Reproach to our Nation, which (by reflecting on the sudden Cessation of so many excellent Things) one would almost believe had but one only Person capable of those rare Productions. It shall suffice then to say in general, that he made the *Louvre* the Center of the Arts, whose Concourse thither in a few Years began to render it the most Noble and Magnificent Structure of the World. It was for this glorious Design, and for the Decoration of other Royal Houses, that the famous *Monsieur le Poussin* had the Honour to be sent for by the King at the beginning of the Year 1640. It was then that the late *M. de Noyers* dispatched us, You and my Self *(dear Brother)* towards his *Holiness* about an important Affair, with Order at our Return to make way for *France* to all the greatest Vertuosi of *Italy*; and as he was their Loadstone, we easily drew a considerable Number after him, whereof the Chief was that renowned and singular Painter *M. le Poussin*, the Glory of the *French* in his Profession, and, as it were, the *Raphael* of our Age: To this Effect we likewise used great Diligence to get made, and collect together, all that the Leisure and Opportunity of our Voyage could furnish us, of the most excellent Antiquities, as well in *Architecture* as *Sculpture*; the chief Pieces whereof were two huge Capitals, the one of a Column, and the other of an angular Pilaster from within the *Rotunda*, which we chose as the most Noble *Corinthian* Models remaining of Antiquity: Two Modules of eleven Palms diameter, taken from the Triumphal Arch of *Constantine*; threescore and ten Bass-Reliefs moulded from *Trajan*'s Column, and several other of particular Histories, some of which were the next Year cast in Brass; others

were employed in manner of Incruſtation about the Compartiment of the arched Ceiling of the *Louvre* great Gallery, in which *M. le Pouſſin* moſt ingeniouſly introduced them, and that with an extraordinary Addreſs and Conſideration, to anſwer a certain Deſign, which was then requir'd of him, not as the moſt magnificent and ſuperb he could have compos'd; but for an Ornament, which ſhould be ſpeedily executed, and of moderate Coſt, with regard to the Time and impatient Humour of our Nation. A little while after that, you returned (my dear Brother) to obtain the Pope's Bleſſing of the two Crowns of Diamonds, and the Golden Babe carried by an Angel, which their Majeſties ſent you to preſent our Lady of *Loretto* in Acknowledgment, and as a Token of Gratitude which they rendred to the Virgin, for the moſt happy, and almoſt miraculous Birth of our *Dauphin*, the King which now reigns: You continued to have divers Figures and *Baſs-Relievo*'s wrought off, particularly the *Flora* and the *Hercules* in *Farneſe*'s Palace, of which there is now one caſt at *Paris*: Two other Modules from the ſame Arch of *Conſtantine*, and both the *Coloſſes* of *Montecavallo* with their Horſes, the greateſt, and the moſt celebrated Works of Antiquity, which *M. de Noyers* deſigned to have alſo caſt in Copper, to place them at the principal Entry of the *Louvre*. You beheld the Splendor which all this great Proviſion made in *Rome*, and how every Body wonder'd that the *French*, who were till now renown'd only for their Valour and invincible Courage in War, and ſeem'd to be affected only to the Arts Military, ſhould ſhew ſo much Paſſion for Theſe, which aſſum'd the Reputation of being the moſt Glorious, by a Prerogative above others; as if the Hemiſphere of *France* had been lately chang'd, and *Mercury*, in Conjunction with *Mars*, began now to pour down new Influences upon her. For my own part, I can teſtifie how the Report of it ſpread as far as *Conſtantinople*, whither *Fame* had born the Name of *Monſeigneur de Noyers* with ſo much Glory, that the Patriarch of that renowned City writ him Letters full of profound Admiration, which he addreſs'd to *Monſieur de Villeroy*, a noble *Athenian*, Reſident in *France* for the Duke of *Parma*, delivering them to my Lord at *Dangu* after his Retreat from the Court, and where I have had and kept them a great while, and read them to ſeveral of my Friends. They take notice chiefly, how new and unheard of a Thing it was, that there ſhould be found a Grand Vizier of our Nation, ſo tranſcendent in all Excellencies; of which ſome Marks he had ſeen, eaſily perſwaded him to believe all the other Marvels which were reported of him: (theſe Exemplars were the Books of the Royal Preſs, and ſome Pieces of Coin) his Letter was ſomewhat prolix, and written in a more polite Style than the vulgar *Greek* now ſpoken in that Country. It were great Pity that a Thing ſo memorable and ſignal ſhould be buried in Oblivion, and therefore I take Notice of it with more Circumſtances than many others. But during all theſe mighty Projects, there happen'd a ſtrange Revolution, which in leſs than ſix Months changed the whole Face of the State, by the Death of that ſuperlative Miniſter the great Cardinal *de Richlieu*, the very Column and Ornament of Monarchy; and a ſhort Space after that, by the Receſs of *Monſeigneur de Noyers*; and immediately upon this, by that Loſs to all *France*, the King himſelf; ſo as all

theſe noble Beginnings had none that followed them, there remaining not one of thoſe which enter d afterwards into the Management of the publick Affairs, who had, with their Affections, the Knowledge and the Talents which were requiſite for the Continuation of thoſe great Deſigns. We then preſently beheld the Work of the *Louvre* abandoned, the finiſhing of the great Gallery to ceaſe; and generally all the Fortifications in *France*, without Hopes of ſeeing the Work reaſſumed and taken in hand again of a long time, it being neceſſary, for ſuch an Enterpriſe, to find aſſembled in the ſame Perſon (as it was ſeen in that of *M. de Noyers*) Virtues and Qualities, both rare and extraordinary. Beſides, to produce ſuch a one as he was, of an univerſal Genius and Capacity, that loved Arts with Judgment, and cultivated them; that would neglect his proper Intereſt, to preſerve that of the State and of the Publick; who, amidſt an Authority and exceeding Favour, retaining ſtill the Modeſty of a private Man, thinks not of eſtabliſhing his Houſe, againſt the ordinary Courſe ſo natural to all Men, ſhould refuſe to augment and heap up Riches, or ſeek Titles and Dignities for it, and that never took Thought, or laboured, as did he during an Employment of twenty Years (for the latter ſix of which he had almoſt the univerſal Management of State Affairs) but for the Safety, Enlargement, and Splendour of the Kingdom: For ſuch a Maſterpiece of Nature, I ſay, there needs the Efforts of many Ages: The Recompence of ſo many Virtues was very ſmall on Man's part, but great and ineſtimable on God's, who crown'd this Illuſtrious Life with a moſt happy Death. I reſerve, as a Treaſure ineſtimable, a certain ſmall Collection of the Sayings of this holy Courtier, our moſt dear Maſter, during the Continuance of his Sickneſs, which was aſſiſted by his Director, the R. F. *de Sainct Jure*, who was with him to the laſt: And as I have had the ſad Conſolation of being preſent at this laſt Act of his Life, during which I remember to have heard from his own Mouth all that is contain'd in this Recital, I am not able to read them without a great deal of Tenderneſs, and indeed without Tears. He died in his Caſtle of *Dangu*, on *Friday* the twentieth of *October*, at one a Clock after Noon, in the Year 1645, and in the ſix and fiftieth of his Age, two Years and a half after his Receſs from Court, his Body being tranſported to the Church of the *Novitiat* belonging to the Jeſuits, which he had built in Honour of St. *Xaverius*, and deſtin'd for his Sepulchre. This Church is look'd upon as the moſt regular Piece of *Architecture* in *Paris*; and tho' it be not ſo exceedingly charg'd with Ornaments as ſome others are, yet it appears very noble in the Eyes of intelligent Perſons; all that is there being done with an Intention and Care ſo extraordinary. But that which in it excels all the reſt, is a Picture of one of the Miracles wrought by St. *Xavier*, which was Painted here at the ſame time with that admirable Supper of the Apoſtles (which he cauſed to be plac'd at the Altar of the Chapel-Royal of the Caſtle of St. *Germains*, where all the Figures exceed the natural:) both of them the Works of our famous Maſter *le Pouſin*, and indeed worthy his Pencil, tho' the firſt of them was Painted with extraordinary Haſte, and during the Winter.

You

The E P I S T L E.

You ſee (dear Brothers) a ſmall Draught of a Part of the Life of our moſt precious and moſt honour'd defunct *M. de Noyers*, that incomparable Genius of *France*, never to be ſufficiently praiſed, never enough regretted, becauſe comparable to the greateſt Examples of Antiquity. I would by all Means place him in the Front of this Book of mine, to let the World ſee that I had no other Object in the finiſhing of this Work (of which he honour'd me with the Charge) than to render the ſame Service and Veneration to his Memory, being dead, I could perform to his Perſon, were he yet alive. However, in reaſſuming it at your Requeſt, my firſt Ardour being much alloy'd, what was heretofore a liberal and divertiſing Study, during the Preſence of my late Lord and Maſter, is now become a Difficulty, and a kind of Conſtraint; ſince I have been forc'd to alter, and even retrench divers Particulars which were then very eſſential to my Deſign, but would now have been altogether uſeleſs and unſeaſonable. Receive then (my dear Brothers) this Fragment of a Book, ſo much at leaſt as remains of it; and if there occurs any thing which may prove yet conſiderable in ſuch clear and diſcerning Eyes as your's are, and that my Deſigns ſeem worthy of any Place amongſt your other Curioſities, you owe the Obligation of it to our common Friend *Monſieur Errard*, who was pleaſed to take a great deal of Pains to ſee it perfected; and has not only perſwaded me (as well as you) to publiſh it to the World; but has, more than this, contributed likewiſe to it of his own Labour and particular Elucubrations.

From *Paris*, the
22 of *May*, 1650.

Amico

Amico Optimo & Chariſſimo

JOHANNI EVELYNO, Armig.

E. Societ. Regali Lond. &c.

JO. BEALE, *S. P. D.*

In ARCHITECTURAM *ab ipſo* Anglicè *redditam & Gra-*
phicè *exornatam.*

SIC, ubi de *Cælo* quondam *primordia rerum*
Effulſere, Chaos diſcutiente *Deo,*
Hortus erat primus: Tunc *Tecta, & Mœnia, & Urbes:*
Tandem & *Pyramidum* nobile ſurgit opus.
His aliquis molem ſubjungit: In aëre pendet
Hortus; & unde venit, quærere jure licet.
Nec ſatis eſt vitam ducamus in Arce beatam
Qualem agit æthereâ *Juppiter* ipſe domo;
Sed Talis ſupereſſe juvat poſt funera longa,
(Quamvis hîc cineres urnula parva capit)
Manſolæa exin cœlos tactura ſepulchra
Inſcriptum *Heröis* nomen ad aſtra vehunt.
Stat quóque, ſi favit Victoria, grande *Tropæum*;
Attollénſque apicem tunc *Obeliſcus* ovat.
Mox ſpirare trucem poteris jurare *Coloſſum,*
Sic movet, ut trepident, & mihi membra labent.
Sunt quibus excidium laudi eſt, & lata ruina;
Atqui exornandi gratia major erit.
Parcite *Mortales,* famam prohibete *Nepotes*;
Ni ſcelus in cauſa deteriore cadit.
Sunt quoque *Tænariis* quibus eſt ſuffulta columnis
Alta & larga nimis, ſed minus apta domus:
Sumptibus hîc turgent operoſa palatia vanis;
Materia exſuperat; ſplendor, & ordo deeſt.
Ecce *Avibus* nidos, *Apibus* compingere cordi eſt,
Paſtor *Ariſteus* quos ſtupet ipſe, favos.
Aurea ſic textrix ſubter laquearia *Arachne*
Divini Artificis provocat ingenium.
Hoſpitium ſibi quæque parant animalcula gratum;
Solus *Homo* impenſis plectitur ipſe ſuis.
Machina quid præſtet *Thuſcis* tractanda peritis,
Angligenæ ut diſcant, *Clare Evelyne,* facis.
Nec tantum debent *Volſæo* priſtina ſæcla,
Quantum debebunt poſteriora tibi.
Creditur *Amphion* molimina ſaxea quondam
Thebarum in muros *concinuiſſe* Lyrâ:
Tu *Saxa* & *Silvas* (nam ſic decet *Orphea*) plectro
Aurato in *Regnum Tecta* coire doces.

TO

THE
ELEMENTS
OF
ARCHITECTURE.

Collected by Sir HENRY WOTTON, *Knt.*
from the beſt AUTHORS *and* EXAMPLES.

THE

PREFACE.

I *Shall not need (like the moſt Part of Writers) to celebrate the* Subject *which I deliver; in that Point I am at eaſe: For* Architecture *can want no Commendation, where there are* noble Men *or* noble Minds: *I will therefore ſpend this* Preface, *rather about* thoſe *from whom I have gathered my Knowledge; For I am but a Gatherer and Diſpoſer of other Mens Stuff at my beſt Value.*

Our principal Maſter *is* Vitruvius, *and ſo I ſhall often call him, who had this* Felicity, *that he wrote when the* Roman Empire *was near the Pitch; or at leaſt, when* Auguſtus *(who favoured his Endeavours) had ſome Meaning (if he were not miſtaken) to bound the* *Monarchy: *This, I ſay, was his good hap, for in growing and enlarging Times,* Arts *are commonly drowned in* Action: *But on the other ſide, it was in truth an* Unhappineſs *to expreſs himſelf ſo ill, eſpecially writing (as he did) in a Seaſon of the ableſt* Pens; *and his* Obſcurity *had this ſtrange Fortune, that though he were beſt practiſed and beſt followed by his own* Countrymen, *yet after the reviving and repoliſhing of good* Literature, *(which the Combuſtions and Tumults of the* middle Age *had* uncivilized) *he was beſt, or at leaſt, firſt underſtood by* Strangers: *For of the* Italians *that took him in hand, thoſe that were* Grammarians *ſeem to have wanted* Mathematical *Knowledge, and the* Mathematicians *perhaps wanted* Grammar, *till both were ſufficiently conjoined in* Leon Baptiſta Alberti *the* Florentine, *whom I repute the firſt learned* Architect *beyond the* Alps; *but he ſtudied more indeed to make himſelf an* Author, *than to illuſtrate his* Maſter: *Therefore among his* Commenters, *I muſt (for my private Conceit) yield the chief Praiſe unto the* French, *in* Philander; *and to the* High Germans, *in* Gualterus Rivius, *who, beſides his Notes, hath likewiſe publiſhed the moſt elaborate* Tranſlation *that I think is extant in any* vulgar *Speech of the World, though not without bewailing, now and then, ſome Defect of* artificial *Terms in his* own, *as I muſt likewiſe; for if the* Saxon (*our* Mother *Tongue*) *did complain; as juſtly (I doubt) in this Point may the* Daughter: Languages *for the moſt Part in Terms of* Art *and* Erudition, *retaining their orginal Poverty, and rather growing rich and abundant in complemental Phraſes, and ſuch Froth. Touching divers* modern *Men that have written out of meer Practice, I ſhall give them their Due upon Occaſion.*

And now, after this ſhort Cenſure *of others, I would fain ſatisfy an* Objection *or two, which ſeem to lie ſomewhat heavily upon my ſelf: It will be ſaid that I handle an* Art *no way ſuitable either to my* Employments, *or to my* Fortune; *and ſo I ſhall ſtand charged both with* Intruſion *and with* Impertinency.

* Tacit. Lib. 1. Annal.

The PREFACE.

To the First *I answer, That though by the ever-acknowledged Goodneſs of my moſt* dear *and* gracious Sovereign, *and by his long indulgent Toleration of my Defects, I have born Abroad ſome Part of his* Civil *Service; yet when I came Home, and was again reſolved into mine own Simplicity, I found it fitter for my* Pen *(at leaſt in this firſt publick Adventure) to deal with theſe plain* Compilements, *and tractable* Materials, *than with the* Labyrinths *and* Myſteries *of* Courts *and* States; *and leſs Preſumption for me who have long contemplated a famous* Republick, *to write now of* Architecture, *than it was anciently for* * Hippodamus *the* Mileſian *to write of* Republicks, *who was himſelf but an* Architect.

To the Second, *I muſt ſhrink up my Shoulders, as I have learn'd Abroad, and confeſs indeed, that my Fortune is very unable to* exemplify *and* actuate *my* Speculations *in this* Art, *which yet in truth made me the rather, even from my very Diſability, take Encouragement to hope, that my preſent* Labour *would find the more Favour with others, ſince it was undertaken for no Man's* ſake *leſs than mine* own: *And with that Confidence I fell into theſe Thoughts, of which there were two ways to be delivered; The one* Hiſtorical, *by Deſcription of the principal* Works, *performed already in good Part, by* Giorgio Vaſſari *in the Lives of* Architects: *The other* Logical, *by caſting the* Rules *and Cautions of this Art into ſome comportable* Method, *whereof I have made choice, not only as the ſhorteſt and moſt* elemental, *but indeed as the* ſoundeſt? *For though in practical* Knowledges, *every compleat* Example *may bear the Credit of a* Rule, *yet peradventure* Rules *ſhould precede, that we may by them be made fit to judge of* Examples: *Therefore to the* Purpoſe, *for I will Preface no longer.*

* Ariſtot. 2. Lib. Polit. Cap. 6.

THE

THE ELEMENTS OF ARCHITECTURE.

PART I.

IN *Architecture*, as in all other Operative Arts, the End muſt direct the Operation.

The End is to Build well.

Well Building hath three Conditions; *Commodity*, *Firmneſs*, and *Delight*.

A common Diviſion among the Deliverers of this Art, though I know not how, ſomewhat miſplaced by *Vitruvius* himſelf, *Lib.* 1. *Cap.* 3. whom I ſhall be willinger to follow, as a Maſter of Proportion than of Method.

Now, for the attaining of theſe Intentions, we may conſider the whole Subject under two General Heads;

The Seat and the Work.

Therefore, firſt touching Scituation.

The Precepts thereunto belonging, do either concern the Total Poſture, (as I may term it) or the placing of the Parts: Whereof the firſt Sort, howſoever uſually ſet down by *Architects* as a Piece of their Profeſſion, yet are in truth borrowed from other Learnings; there being between Arts and Sciences, as well as between Men, a kind of good Fellowſhip, and Communication of their Principles.

For you ſhall find ſome of them to be meerly Phyſical, touching the Quality and Temper of the Air; which being a perpetual Ambient and Ingredient, and the Defects thereof incorrigible in ſingle Habitations (which I moſt intend) doth in thoſe Reſpects require the more exquiſite Caution: That it be not too groſs, nor too penetratious, not ſubject to any foggy Noiſomeneſs from Fenns or Marſhes near adjoining; nor to Mineral Exhalations from the Soil it ſelf. Not undigeſted for want of Sun, not unexerciſed for want of Wind; which were to live (as it were) in a Lake, or ſtanding Pool of Air, as *Alberti* the *Florentine Architect* doth ingeniouſly compare it.

Some do rather ſeem a little Aſtrological, as when they warn us from Places of malign Influence, where Earthquakes, Contagions, Prodigious Births, or the like, are frequent, without any evident Cauſe, whereof the Conſideration is, peradventure, not altogether vain: Some are plainly Oeconomical; as that the Seat be well watered and well fewelled; that it be not of too ſteepy and incommodious Acceſs to the Trouble both of Friends and Family; that it lie not too far from ſome navigable River, or Arm of the Sea, for more Eaſe of Proviſion, and ſuch other Domeſtick Notes.

Some again may be ſaid to be Optical; ſuch I mean as concern the Properties of a well-choſen Proſpect, which I will call the Royalty of Sight: For as there is a Lordſhip (as it were) of the Feet, wherein the Maſter doth much joy when he walketh about the Line of his own Poſſeſſions: So there is a Lordſhip likewiſe of the Eye, which being a ranging and imperious, and (I might ſay) an uſurping Senſe, can endure no narrow Circumſcription; but muſt be fed both with Extent and Variety. Yet on the other ſide, I find vaſt and indefinite Views, which drown all Apprehenſions of the uttermoſt Objects, condemned by good Authors, as if thereby ſome part of the Pleaſure (whereof we ſpeak) did periſh Laſtly, I remember a private Caution, which I know not well how to ſort, unleſs I ſhould call it Political: By no means to build too near a great Neighbour; which were in truth to be as unfortunately ſeated on the Earth, as *Mercury* is in the Heavens, for the moſt part ever in Combuſtion or Obſcurity, under brighter Beams than his own.

From theſe ſeveral Knowledges, as I have ſaid, * and perhaps from ſome other, do *Architects* derive their Doctrine about Election of Seats, wherein I have not been ſo ſevere as a great Scholar of our Time, who preciſely reſtraineth a perfect Scituation, at leaſt for the main Point of Health, *Ad locum contra quem Sol radios ſuos fundit cum ſub Ariete oritur*, that is, in a word, He would have the firſt Salutation of the Spring. But ſuch Notes as theſe, whereſoever we find them in grave or ſlight Authors, are to my Conceit, rather Wiſhes than Precepts; and in that Quality I will paſs them over. Yet I muſt withal ſay, that in the Seating of our ſelves (which is a kind of Marriage to a Place) Builders ſhould be as circumſpect as Wooers, leſt when all is done, that Doom befall us, † which our Maſter doth lay upon *Mitylene: A Town in truth* (ſaith he) *finely built, but fooliſhly planted.* And ſo much touching that, which I termed the Total Poſture.

The next in Order, is the placing of the Parts; about which (to leave as little as I may in my preſent Labour, unto Fancy, which is wild and irregular) I will propound a Rule of mine own Collection, upon which I fell in this manner: I had noted, that all Art was then in trueſt Perfection, when it might be reduced to ſome natural Principle: For what are the moſt judicious Artiſans, but the Mimicks of Nature? This led me to contemplate the Fabrick of our own Bodies, wherein the *High Architect* of the World had diſplayed ſuch Skill, as did ſtupify all humane Reaſon. There I found the Heart, as the Fountain of Life, placed about the Middle, for the

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* *Joannes Heurnius Inſtit. Medicin. Lib. 7. Cap. 2.* † *Opidum quidem ædificatum eleganter ſed imprudenter poſitum.*

the more equal Communication of the vital Spirits; the Eyes ſeated aloft, that they might deſcribe the greater Circle within their View; the Arms projected on each Side, for eaſe of Reaching. Briefly, (not to loſe our ſelves in this ſweet Speculation) it plainly appeareth as a Maxim drawn from the divine Light, that the Place of every Part is to be determined by the Uſe.

So then, from natural Structure to proceed to artificial, and in the rudeſt Things to preſerve ſome Image of the excellenteſt, let all the principal Chambers of Delight, all Studies and Libraries, be towards the *Eaſt*; for the Morning is a Friend to the Muſes. All Offices that require Heat, as Kitchins, Stillatories, Stoves, Rooms for Baking, Brewing, Waſhing, or the like, would be *Meridional*. All that need a cool and freſh Temper, as Cellars, Pantries, Butteries, Granaries, to the *North*. To the ſame Side likewiſe, all that are appointed for gentle Motion, as Galleries, eſpecially in warm Climes, or that otherwiſe require a ſteady and unvariable Light, as *Pinacothecia* (ſaith *Vitruvius*) by which he intendeth, (if I may gueſs at his *Greek*, as we muſt do often even at his *Latin*) certain Repoſitories for Works of Rarity in Picture or other Arts, by the *Italians* called *Studioli*, which at any other Quarter, where the Courſe of the Sun doth diverſify the Shadows, would loſe much of their Grace: And by this Rule, having always regard to the Uſe, any other Part may be fitly accommodated.

I muſt here not omit to note, that the ancient *Grecians*, and the *Romans*, by their Example in their Buildings abroad, where the Seat was free, did almoſt religiouſly ſcituate the Front of their Houſes towards the *South*, perhaps that the Maſter's Eye, when he came home, might not be dazzled, or that being illuſtrated by the Sun, it might yield the more graceful Aſpect, or ſome ſuch Reaſon. But from this the modern *Italians* do vary, whereof I ſhall ſpeak more in another Place. Let thus much ſuffice at the preſent for the Poſition of the ſeveral Members, wherein muſt be had, as our Author doth often inſinuate, and eſpecially, *Lib. 6. Cap.* 10. a ſingular Regard to the Nature of the Region: Every Nation being tied above all Rules whatſoever, to a Diſcretion of providing againſt their own Inconveniencies; and therefore a good Parlour in *Ægypt*, would perchance make a good Cellar in *England*.

There now followeth the ſecond Branch of the general Section touching the Work.

In the Work, I will firſt conſider the principal Parts, and afterwards the Acceſſory, or Ornaments: And in the Principal, firſt the Preparation of the Materials, and then the Diſpoſition, which is the Form.

Now concerning the material Part, although, ſurely, it cannot diſgrace an *Architect*, which doth ſo well become a Philoſopher, to look into the Properties of Stone and Wood; as that Fir-Trees, Cypreſſes, Cedars, and ſuch other aereal aſpiring Plants, being by a kind of natural Rigour (which in a Man I would call Pride) inflexible downwards, are thereby fitteſt for Poſts or Pillars, or ſuch upright Uſe; that on the other Side, Oak, and the like true hearty Timber being ſtrong in all Poſitions, may be better truſted in croſs and traverſe Work, for Summers, or girding and binding Beams, as they term them. And ſo likewiſe to obſerve of Stone, that ſome are better

ter within, and other to bear Weather. Nay, to descend lower, even to examine Sand and Lime, and Clay, (of all which Things *Vitruvius* hath discoursed, without any Dainties, and the most of new Writers) I say, though the Speculative Part of such Knowledge be liberal, yet to redeem this Profession, and my present Pains from Indignity, I must here remember, that to chuse and sort the Materials for every part of the Fabrick, is a Duty more proper to a second Superintendent over all the Under Artisans, called (as I take it) by our Author, *Officinator*, *Lib. 6. Cap.* 11. and in that Place expresly distinguished from the *Architect*, whose Glory doth more consist in the Designment and Idea of the whole Work, and his truest Ambition should be to make the Form, which is the nobler Part (as it were) triumph over the Matter; whereof I cannot but mention by the way a foreign Pattern, namely the Church of *Santa Giustina* in *Padua*. In truth, a sound Piece of good Art, where the Materials being but ordinary Stone, without any Garnishment of Sculpture, do yet ravish the Beholder, (and he knows not how) by a secret Harmony in the Proportions. And this indeed is that End, at which, in some degree, we should aim even in the privatest Works; whereunto though I make haste, yet let me first collect a few of the least trivial Cautions belonging to the materal Provision.

Leon Baptista Alberti is so curious, as to wish all the Timber cut out of the same Forest, and all the Stone out of the same Quarry.

Philibert de l'Orme, the *French* Architect, goes yet somewhat farther, and would have the Lime made of the very same Stone which we intend to imploy in the Work; as belike imagining, that they will sympathize and join the better, by a kind of original Kindred. But such Conceits as these seem somewhat too fine among this Rubbish, though I do not produce them in Sport; for surely the like Agreements of Nature may have oftentimes a discreet Application to Art: Always it must be confessed, that to make Lime without any great Choice of refuse Stuff, as we commonly do, is an *English* Error of no small Moment in our Buildings: Whereas the *Italians* at this Day, and much more the Antients, did burn their firmest Stone, and even Fragments of Marble, where it was copious, which in Time became almost Marble again, or at least of indissoluble Durity, as appeareth in the standing Theatres. I must here not omit, while I am speaking of this Part, a certain Form of Brick described by *Daniel Barbaro*, Patriarch of *Aquileia*, in the largest Edition of his Commentary upon *Vitruvius*. The Figure triangular, every Side a Foot long, and some Inch and a half thick, which he doth commend unto us for many good Conditions; as that they are more commodious in the Management, of less Expence, of fairer Show, adding much Beauty and Strength to the mural Angles, where they fall gracefully into an indented Work; so as I should wonder that we have not taken them into Use, being propounded by a Man of good Authority in this Knowledge, but that all Nations do start at Novelties, and are indeed married to their own Molds. Into this Place might aptly fall a Doubt, which some have well moved, whether the ancient *Italians* did burn their Brick or no; which a Passage or two in *Vitruvius* hath left ambiguous. Surely, where the natural Heat is strong enough to supply the artificial, it were but a curious Folly to multiply both Labour and Expence. And it is besides very probable,

that thoſe Materials, with a kindly and temperate Heat, would prove fairer, ſmoother, and leſs diſtorted than with a violent: Only they ſuffer two Exceptions, Firſt, That they are likely by ſuch a gentle drying, to be the more ponderous, an important Circumſtance to the Main of the Work in the Compilement. The next is of no leſs Moment, That they will want a certain ſucking and ſoaking Thirſtineſs, or a fiery Appetite to drink in the Lime which muſt knit the Fabrick. But this Queſtion is to be confined to the *South*, where there is more Sun and Patience: I will therefore not hinder my Courſe with this incident Scruple, but cloſe that part which I have now in hand about the Materials, with this principal Caution, That ſufficient Stuff and Money be ready before we begin; for when we build now a Piece, and then another, by Fits, the Work dries and ſinks unequally, whereby the Walls grow full of Chinks and Crevices; wherefore ſuch a pauſing Humour is well reproved by *Palladio*, *Lib.* 1. *Cap.* 1. and by all other. And ſo having gleaned theſe few Remembrances touching the Preparation of the Matter, I may now proceed to the Diſpoſition thereof, which muſt form the Work. In the Form, as I did it in the Seat, I will firſt conſider the general Figuration, and then the ſeveral Members.

Figures are either ſimple or mixed; the ſimple be either circular or angular: And of circular, either compleat or deficient, as Ovals; with which Kinds I will be contented, though the Diſtribution might be more curious.

Now the exact Circle is in truth a Figure, which for our Purpoſe hath many fit and eminent Properties, as fitneſs for Commodity and Receipt, being the moſt capable; fitneſs for Strength and Duration, being the moſt united in his Parts; fitneſs for Beauty and Delight, as imitating the Celeſtial Orbs, and the Univerſal Form: And it ſeems, beſides, to have the Approbation of Nature, when ſhe worketh by Inſtinct, which is her ſecret School; for Birds do build their Neſts ſpherically: But notwithſtanding theſe Attributes, it is in truth a very unprofitable Figure in private Fabricks, as being of all other the moſt chargeable, and much Room loſt in the bending of the Walls when it comes to be divided, beſides an ill Diſtribution of Light, except from the Center of the Roof: So as anciently it was not uſual, ſave in their Temples and Amphi-Theatres, which needed no Compartitions. The Ovals and other imperfect circular Forms, have the ſame Exceptions, and leſs Benefit of Capacity: So as there remains to be conſidered in this general Survey of Figures, the angular and the mixed of both. Touching the Angular, it may perchance ſound ſomewhat ſtrangely, but it is a true Obſervation, that this Art doth neither love many Angles, nor few. For, firſt, the Triangle, which hath the feweſt Sides and Corners, is of all other the moſt condemned, as being indeed both incapable and infirm (whereof the Reaſon ſhall be afterwards rendred) and likewiſe unreſolvable into any other regular Form than it ſelf in the inward Partitions.

As for Figures, of five, ſix, ſeven, or more Angles, they are ſurely fitter for *Military Architecture*, where the Bullworks may be laid out at the Corners, and the Sides ſerve for Curtains, than for Civil Uſe, though I am not ignorant of that famous Piece at *Caprarola*, belonging to the Houſe of *Farneſe*, caſt by *Baroccio* into the Form of a Pentagon, with a Circle inſcribed, where the *Architect* did ingeniouſly wreſtle with divers Inconveniencies in diſpoſing

of the Lights, and in ſaving the Vacuities. But as Deſigns of ſuch Nature do more aim at Rarity than Commodity; ſo for my Part, I had rather admire them than commend them.

Theſe Things conſidered, we are both by the Precepts and by the Practice of the beſt Builders, to reſolve upon Rectangular Squares, as a Mean between too few, and too many Angles; and through the equal Inclination of the Sides (which make the right Angle) ſtronger than the Rhombe, or Lozenge, or any other irregular Square. But whether the exact Quadrat, or the long Square be the better, I find not well determined, though in mine own Conceit I muſt prefer the latter, provided that the Length do not exceed the Latitude above one third Part, which would diminiſh the Beauty of the Aſpect, as ſhall appear when I come to ſpeak of Symmetry and Proportion.

Of mixed Figures, partly Circular, and partly Angular, I ſhall need to ſay nothing, becauſe having handled the ſimple already, the mixed according to their Compoſition, do participate of the ſame Reſpects: Only againſt theſe there is a proper Objection, that they offend Uniformity, whereof I am therefore opportunely induced to ſay ſomewhat, as far as ſhall concern the outward Aſpect, which is now in Diſcourſe.

In *Architecture* there may ſeem to be two oppoſite Affectations, Uniformity and Variety, which yet will very well ſuffer a good Reconcilement, as we may ſee in the great Pattern of Nature, to which I muſt often reſort: For ſurely there can be no Structure more uniform than our Bodies in the whole Figuration, each Side agreeing with the other, both in the Number, in the Quality, and in the Meaſure of the Parts: And yet ſome are round, as the Arms; ſome flat, as the Hands; ſome prominent, and ſome more retired; ſo as upon the Matter, we ſee that Diverſity doth not deſtroy Uniformity, and that the Limbs of a noble Fabrick may be correſpondent enough, though they be various; Provided always, that we do not run into certain extravagant Inventions, whereof I ſhall ſpeak more largely when I come to the parting and caſting of the whole Work. We ought likewiſe to avoid enormous Heights of ſix or ſeven Stories, as well as irregular Forms; and the contrary Fault of low diſtended Fronts is as unſeemly: Or again, When the Face of the Building is narrow, and the Flank deep, to all which Extremes ſome particular Nations or Towns are ſubject, whoſe Names may be civilly ſpared; and ſo much for the general Figuration or Aſpect of the Work.

Now concerning the Parts in Severalty: All the Parts of every Fabrick may be compriſed under five Heads, which Diviſion I receive from *Baptiſta Alberti*, to do him right: And they be theſe,

The *Foundation.*
The *Walls.*
The *Appertions* or *Overtures.*
The *Compartition*,
And the *Cover.*

About all which I purpoſe to gather the principal Cautions; and as I paſs along, I will touch alſo the natural Reaſons of Art, that my Diſcourſe may be the leſs mechanical.

First then concerning the Foundation, which requireth the exacteſt Care; for if that happen to dance, it will mar all the Mirth in the Houſe: Therefore, that we may found our Habitation firmly, we muſt firſt examine the Bed of Earth (as I may term it) upon which we will build; and then the Underſilings or Subſtruction, as the Antients did call it: For the former, we have a general Precept in *Vitruvius*, twice precilely repeated by him, as a Point indeed of main Conſequence; firſt *Lib.* 1. *Cap.* 5. And again more fitly, *Lib.* 3. *Cap.* 3. in theſe Words, as *Philander* doth well correct the vulgar Copies.

Subſtructionis Fundationes fodiantur (ſaith he) *ſi queant inveniri ad ſolidum, & in ſolido.* By which Words I conceive him to commend unto us, not only a diligent, but even a jealous Examination what the Soil will bear, adviſing us not to reſt upon any appearing Solidity, unleſs the whole Mold through which we cut, have likewiſe been ſolid; but how deep we ſhould go in this Search, he hath no where to my remembrance determined, as perhaps depending more upon Diſcretion than Regularity, according to the Weight of the Work; yet *Andrea Palladio* hath fairly adventured to reduce it into Rule, allowing for that * *Cavaſione* (as he calleth it) a ſixth Part of the Height of the whole Fabrick, unleſs the Cellars be under Ground, in which Caſe he would have us (as it ſhould ſeem) to ſound ſomewhat lower.

Some *Italians* do preſcribe, that when they have choſen the Floor, or Plot, and laid out the Limits of the Work, we ſhould firſt of all dig Wells and Ciſterns, and other Under-conducts and Conveyances for the Suillage of the Houſe, whence may ariſe a double Benefit, for both the Nature of the Mold or Soil would thereby be ſafely ſearched; and moreover, thoſe open Vents will ſerve to diſcharge ſuch Vapours, as having otherwiſe no Iſſue, might peradventure ſhake the Building. This is enough for the natural Grounding, which though it be not a Part of the ſolid Fabrick, yet here was the fitteſt Place to handle it.

There followeth the Subſtruction or Groundwork of the whole Edifice, which muſt ſuſtain the Walls; and this is a Kind of artificial Foundation, as the other was natural, about which theſe are the chief Remembrances: Firſt, That the Bottom be preciſely level, where the *Italians* therefore commonly lay a Platform of good Board; then that the loweſt Ledge or Row be meerly of Stone, and the broader the better, cloſely laid without Mortar, which is a general Caution for all Parts in Building that are contiguous to Board or Timber, becauſe Lime and Wood are inſociable, and if any where unfit Confiners, then moſt eſpecially in the Foundation. Thirdly, That the Breadth of the Subſtruction be at leaſt double to the inſiſtent Wall, and more or leſs, as the Weight of the Fabrick ſhall require; for as I muſt again repeat, Diſcretion may be freer than Art. Laſtly, I find in ſome a curious Precept, That the Materials below be laid as they grew in the Quarry, ſuppoſing them belike to have moſt Strength in their natural and habitual Poſture. For as *Philippe de l'Orme* obſerveth, the breaking or yielding of a Stone in this Part but the Breadth of the Back of a Knife, will make a Cleft of more than half a Foot in the Fabrick aloft, ſo important are Fundamental Errors; among which Notes I have ſaid nothing of Palliſicati-

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* *Under-digging, or Hollowing of the Earth.*

on, or plying of the Groundplot, commanded by *Vitruvius* when we build upon a moiſt or marſhy Soil, becauſe that were an Error in the firſt Choice; and therefore all Seats that muſt uſe ſuch Proviſion below (as *Venice* for an eminent Example) would, perhaps, upon good Enquiry, be found to have been at firſt choſen by the Counſel of Neceſſity.

Now the Foundation being ſearched, and the Subſtruction laid, we muſt next ſpeak of the Walls.

Walls are either entire and continual, or intermitted, and the Intermiſſions be either Pillars or Pilaſters, for here I had rather handle them, than as ſome others do, among Ornaments.

The entire *Murmg*, is by Writers diverſly diſtinguiſhed: By ſome, according to the quality of the Materials, as either Stone or Brick, *&c.* where, by the way, let me note, that to build Walls and greater Works of Flint, whereof we want not Example in our Iſland, and particularly in the Province of *Kent*, was (as I conceive) meerly unknown to the Antients, who obſerving in that Material a kind of Metalical Nature, or at leaſt a Fuſibility, ſeem to have reſolved it into nobler Uſe, an Art now utterly loſt, or perchance kept up by a few Chymicks. Some again do not ſo much conſider the Quality, as the Poſition of the ſaid Materials; as when Brick or ſquared Stones are laid in their Lengths, with Sides and Heads together, or their Points conjoined like a Network (for ſo *Vitruvius* doth call it, *Reticulatum Opus*) of familiar Uſe (as it ſhould ſeem) in his Age, though afterwards grown out of Requeſt, even perhaps for that ſubtil Speculation which he himſelf toucheth; becauſe ſo laid, they are more apt in ſwagging down, to pierce with their Points, than in the adjacent Poſture, and ſo to crevice the Wall. But to leave ſuch Cares to the meaner Artificers, the more eſſential are theſe:

That the Walls be moſt exactly perpendicular to the Groundwork; for the right Angle (thereon depending) is the true Cauſe of all Stability both in artificial and natural Poſitions, a Man likewiſe ſtanding firmeſt when he ſtands uprighteſt. That the maſſieſt and heavieſt Materials be the loweſt, as fitter to bear than to be born; that the Work as it riſeth, diminiſh in Thickneſs proportionally, for eaſe both of Weight and of Expence; that certain Courſes or Ledges of more Strength than the reſt, be interlaid like Bones, to ſuſtain the Fabrick from total Ruine, if the under Parts ſhould decay. Laſtly, That the Angles be firmly bound, which are the Nerves of the whole Edifice, and therefore are commonly fortified by the *Italians*, even in their Brick Buildings, on each ſide of the Corners, with well ſquared Stone, yielding both Strength and Grace: And ſo much touching the entire or ſolid Wall.

The Intermiſſions (as hath been ſaid) are either by Pillars or Pilaſters.

Pillars, which we may likewiſe call Columns (for the Word among Artificers is almoſt naturalized) I could diſtinguiſh into ſimple and compounded. But (to tread the beaten and plaineſt way) there are five Orders of Pillars, according to their Dignity and Perfection, thus marſhalled;

The *Tuſcan.*
The *Dorick.*
The *Ionick.*
The *Corinthian.*

And

And the *Compound Order*, or as ſome call it, the *Roman*, others more generally, the *Italian*.

In which five Orders I will firſt conſider their Communities, and then their Properties.

Their Communities (as far as I obſerve) are principally Three: *Firſt*, They are all round, for though ſome conceive *Columna Atticurges* mentioned by *Vitruvius*, *Lib.* 3. *Cap.* 3. to have been a ſquared Pillar, yet we muſt paſs it over as irregular, never received among theſe Orders, no more than certain other licentious Inventions, of wreathed, and vined, and figured Columns, which our Author himſelf condemneth, being in his whole Book a profeſſed Enemy to Fancies.

Secondly, They are all diminiſhed or contracted inſenſibly, more or leſs, according to the Proportion of their Heights, from one third Part of the whole Shaft upwards, which *Philander* doth preſcribe by his own preciſe meaſuring of the ancient Remainders, as the moſt graceful Diminution. And here I muſt take leave to blame a Practice grown (I know not how) in certain Places too familiar, of making Pillars ſwell in the Middle, as if they were ſick of ſome Tympany or Dropſy, without any authentick Pattern or Rule, to my Knowledge, and unſeemly to the very Judgement of Sight. True it is, that in *Vitruvius*, *Lib.* 3. *Cap* 2. we find theſe Words, *De adjectione quæ adjicitur in medius Columnis*; *quæ apud Græcos* Ἔντασις *appellatur*, *in extremo libro erit formatio ejus*; which Paſſage ſeemeth to have given ſome countenance to this Error. But of the Promiſe there made, as of divers other elſewhere, our Maſter hath failed us, either by ſlip of Memory, or injury of Time, and ſo we are left in the Dark. Always ſure I am, that beſides the Authority of Example, which it wanteth, it is likewiſe contrary to the original and natural Type in Trees, which at firſt was imitated in Pillars, as *Vitruvius* himſelf obſerveth, *Lib.* 5. *Cap.* 1. For whoever ſaw any Cypreſs or Pine (which are there alledged) ſmall below and above, and tumerous in the middle, unleſs it were ſome diſeaſed Plant, as Nature (though otherwiſe the comelieſt Miſtreſs) hath now and then her Deformities and Irregularities.

Thirdly, They have all their Underſettings or Pedeſtals, in Height a third part of the whole Column, comprehending the Baſe and Capital, and their upper Adjuncts, as Architrave, Frize, and Cornice, a fourth part of the ſaid Pillar; which Rule, of ſingular Uſe and Facility, I find ſettled by *Jacobo Baroccio*, and hold him a more credible Author, as a Man that moſt intended this Piece, than any that vary from him in thoſe Dimenſions.

Theſe are their moſt conſiderable Communities and Agreements.

Their Properties or Diſtinctions will beſt appear, by ſome reaſonable Deſcription of them all, together with their Architraves, Frizes, and Cornices, as they are uſually handled.

Firſt, therefore, the *Tuſcan* is a plain, maſſy, rural Pillar, reſembling ſome ſturdy well-limbed Labourer, homely clad, in which kind of Compariſons, *Vitruvius* himſelf ſeemeth to take Pleaſure, *Lib.* 4. *Cap.* 1. The Length thereof ſhall be ſix Diameters, of the groſſeſt of the Pillar below, of all Proportions in truth the moſt natural; for our Author tells us, *Lib.* 3. *Cap.* 1. that the Foot of a Man is the ſixth Part of his Body in ordinary Meaſure, and Man himſelf, according to the Saying of *Protagoras* (which *Ariſtotle*

ſtotle doth ſomewhere vouchſafe to celebrate) is τὸ τῆς ἀπαίτων χρημάτων μέτρον. as it were the Prototipe of all exact Symmetry, which we have had other Occaſion to touch before: This Column I have by good warrant called Rural, *Vitru Lib.* 3. *Cap.* 2. and therefore we need not conſider his Rank among the reſt. The Diſtance or Intercolumniation (which Word Artificers do uſually borrow) may be near four of his own Diameters, becauſe the Materials commonly laid over this Pillar, were rather of Wood than Stone, through the Lightneſs whereof the Architrave could not ſuffer, though thinly ſupported, nor the Column it ſelf being ſo ſubſtantial. The Contraction aloft ſhall be (according to the moſt received Practice) one fourth part of his Thickneſs below. To conclude, (for I intend only as much as ſhall ſerve for a due Diſtinguiſhment, and not to delineate every petty Member) the *Tuſcan* is of all the rudeſt Pillar, and his principal Character, Simplicity.

The *Dorick* Order is the graveſt that hath been received into civil Uſe, preſerving, in Compariſon of thoſe that follow, a more maſculine Aſpect, and little trimmer than the *Tuſcan* that went before, ſave a ſober Garniſhment now and then of Lions Heads in the Cornice, and of Triglyphs and Metopes always in the Frize: Sometimes likewiſe, but rarely channelled, and a little ſlight Sculpture about the Hypotrachelion, or Neck, under the Capital. The Length ſeven Diameters. His Rank or Degree is the loweſt by all Congruity, as being more maſſy than the other three, and conſequently abler to ſupport. The Intercolumniation thrice as much as his Thickneſs below. The Contraction aloft, one fifth of the ſame Meaſure. To diſcern him, will be a Piece rather of good *Heraldry* than of *Architecture*; for he is beſt known by his Place, when he is in Company, and by the peculiar Ornament of his Frize (before-mentioned) when he is alone.

The *Ionick* Order doth repreſent a kind of Feminine Slenderneſs, yet ſaith *Vitruvius*, not like a light Houſewife, but in a decent Dreſſing, hath much of the Matron. The Length eight Diameters. In Degree, as in Subſtantialneſs, next above the *Dorick*, ſuſtaining the third, and adorning the ſecond Story. The Intercolumniation, two of his own Diameters. The Contraction, one ſixth part, beſt known by his Trimmings; for the Body of this Column is perpetually channelled, like a thick pleated Gown. The Capital dreſſed on each Side, not much unlike Womens Wires, in a ſpiral Wreathing, which they call the *Ionian Voluta*. The Cornice indented. The Frize ſwelling like a Pillow, and therefore by *Vitruvius* not unelegantly termed *Pulvinata*. Theſe are his beſt Characters.

The *Corinthian*, is a Column laciviouſly decked like a Curteſan, and therein much participating (as all Inventions do) of the Place where they were firſt born: *Corinth* having been without Controverſy, one of the wantoneſt Towns in the World. This Order is of nine Diameters. His Degree one Stage above the *Ionick*, and always the higheſt of the ſimple Orders. The Intercolumniation, two of his Diameters, and a fourth part more, which is of all other the comlieſt Diſtance. The Contraction one ſeventh Part. In the Cornice, both *Dentelli* and *Modiglioni*. * The Frize adorned with all Kinds of

* *Our Artizans call them Teeth and Cartouzes.*

Figures and various Compartments at Pleaſure. The Capital, cut into the beautifulleſt Leaf that Nature doth yield, which ſurely next the *Aconitum Pardalianches* (rejected perchance as an ominous Plant) is the *Acanthus* or *Branca Urſina*, though *Vitruvius* do impute the Choice thereof unto Chance, and we muſt be contented to believe him: In ſhort, as Plainneſs did characterize the *Tuſcan*, ſo muſt Delicacy and Variety the *Corinthian* Pillar, beſides the Height of his Rank.

The laſt is the Compounded Order; his Name being a Brief of his Nature: For this Pillar is nothing in effect but a Medly, or an Amaſs of all the precedent Ornaments, making a new Kind by Stealth; and though the moſt richly tricked, yet the pooreſt in this, that he is a Borrower of all his Beauty. His Length, (that he may have ſomewhat of his own) ſhall be of ten Diameters. His Degree ſhould, no doubt, be the higheſt, by Reaſons before yielded: But few Palaces, antient or modern, exceed the third of the Civil Orders. The Intercolumniation but a Diameter and an half, or always ſomewhat leſs than two. The Contraction of this Pillar muſt be one eighth Part leſs above than below. To know him, will be eaſie by the very Mixture of his Ornaments and Cloathing.

And ſo much touching the five Orders of Columns, which I will conclude with two or three not impertinent Cautions:

Firſt, That where more of theſe Orders than one ſhall be ſet in ſeveral Stories or Contignations, there muſt be an exquiſite Care to place the Columns preciſely one over another, that ſo the Solid may anſwer to the Solid, and the Vacuities to the Vacuities, as well for Beauty as Strength of the Fabrick; and by this Caution the Conſequence is plain, that when we ſpeak of the Intercolumniation or Diſtance which is due to each Order, we mean in a *Dorick*, *Ionical*, *Corinthian* Porch or Cloyſter, or the like of one Contignation, and not in Storied Buildings.

Secondly, Let the Columns above be a fourth Part leſs than thoſe below, ſaith *Vitruvius*, *Lib.* 5. *Cap.* 15. A ſtrange Precept, in my Opinion, and ſo ſtrange, that peradventure it were more ſuitable even to his own Principles, to make them rather a fourth Part greater; for *Lib.* 3. *Cap.* 2. where our Maſter handleth the Contraction of Pillars, we have an Optick Rule, that the higher they are, the leſs ſhould be always their Diminution aloft, becauſe the Eye it ſelf doth naturally contract all Objects, more or leſs, according to the Diſtance; which Conſideraion, may, at firſt Sight, ſeem to have been forgotten in the Caution we have now given; but *Vitruvius* (the beſt Interpreter of himſelf) hath in the ſame Place of his fifth Book, well acquitted his Memory by theſe Words; *Columnæ ſuperiores quarta parte minores, quàm inferiores, ſunt conſtituendæ; propterea quòd, operi ferendo quæ ſunt inferiora, firmiora eſſe debent*; preferring, like a wiſe Mechanick, the natural Reaſon before the Mathematical, and ſenſible Conceits before abſtracted: And yet, *Lib.* 4. *Cap.* 4. he ſeemeth again to affect Subtilty, allowing Pillars the more they are channelled, to be the more ſlender, becauſe while our Eye (*ſaith he*) doth as it were diſtinctly meaſure the eminent and the hollowed Parts, the Total Object appeareth the bigger, and ſo as much as thoſe Excavations do ſubtract, is ſupplied by a Fallacy of the Sight: But here, methinks, our Maſter ſhould likewiſe have rather conſidered the natural Inconvenience; for though Pillars

lars by channelling, be ſeemingly ingroſſed to our Sight, yet they are truly weakened in themſelves, and therefore ought perchance in ſound Reaſon, not to be the more ſlender, but the more corpulent, unleſs Appearances preponder Truths; but *Contra Magiſtrum, non eſt Diſputandum.*

A *Third* Caution ſhall be, That all the projected or jutting Parts (as they are termed) be very moderate, eſpecially the Cornices of the lower Orders; for whilſt ſome think to give them a beautiful and royal Aſpect, by their Largeneſs, they ſometimes hinder both the Light within, (whereof I ſhall ſpeak more in due Place) and likewiſe detract much from the View of the Front without, as well appeareth in one of the principal Fabricks at *Venice*, namely, the Palace of the Duke *Grimani* on the *Canal Grande*, which by this magnificent Error is ſomewhat diſgraced. I need now ſay no more concerning Columns and their Adjuncts, about which Architects make ſuch a Noiſe in their Books, as if the very Terms of Architraves, and Frizes, and Cornices, and the like, were enough to graduate a Maſter of this Art; yet let me before I paſs to other Matter, prevent a familiar Objection. It will perchance be ſaid, that all this Doctrine touching the five Orders, were fitter for the Quarries of *Aſia*, which yielded One hundred and twenty-ſeven Columns of Sixty Foot high, to the *Epheſian* Temple; or for *Numidia*, where Marbles abound, than for the Spirits of *England*, who muſt be contented with more ignoble Materials. To which I anſwer, That this need not diſcourage us; for I have often at *Venice* viewed with much Pleaſure, an *Atrium Græcum* (we may tranſlate it an Anti-Porch, after the *Greek* manner) raiſed by *Andrea Palladio*, upon eight Columns of the Compounded Order; the Bales of Stone, without Pedeſtals; the Shafts or Bodies of meer Brick, three Foot and an half thick in the Diameter below, and conſequently thirty-five Foot high, as himſelf hath deſcribed them in his Second Book, than which mine Eye hath never yet beheld any Columns more ſtately of Stone or Marble; for the Bricks having firſt been formed in a circular Mould, and then cut before their burning into four Quarters or more, the Sides afterwards join ſo cloſely, and the Points concenter ſo exactly, that the Pillars appear one entire Piece; which ſhort Deſcription I could not omit, that thereby may appear how in truth we want rather Art than Stuff to ſatisfy our greateſt Fancies.

After Pillars, the next in my Diſtribution, are Pilaſters, mentioned by *Vitruvius, Lib.* 5. *Cap.* 1. and ſcant any where elſe, under the Name of *Paraſtates*, as *Philander* conceiveth; which *Grammatical* Point (though perchance not very clear) I am contented to examine no farther. Always, what we mean by the Thing it ſelf, is plain enough in our own Vulgar, touching which, I will briefly collect the moſt conſiderable Notes.

Pilaſters muſt not be too tall and ſlender, leaſt they reſemble Pillars; nor too dwarfiſh and groſs, leaſt they imitate Piles or Peers of Bridges: Smoothneſs doth not ſo naturally become them, as a ruſtick Superficies, for they aim more at State and Strength than Elegancy. In private Buildings they ought not to be narrower than one Third, nor broader than two Parts of the whole Vacuity, between Pilaſter and Pilaſter; but to thoſe that ſtand at the Corners, may be allowed a little more Latitude by Diſcretion, for Strength of the Angles. In Theaters and Amphi-Theaters, and ſuch weighty Works,

Palladio obſerveth them to have been as broad as the half, and now and then as the whole Vacuity. He noteth likewiſe (and others conſent with him) that their true Proportion ſhould be an exact Square; but for leſſening of Expence, and inlarging of Room, they are commonly narrower in Flank than in Front: Their principal Grace doth conſiſt in half or whole Pillars applied unto them; in which Caſe it is well noted by Authors, that the Columns may be allowed ſomewhat above their ordinary Length, becauſe they lean unto ſo good Supporters. And thus much ſhall ſuffice touching Pilaſters, which is a cheap, and a ſtrong, and a noble kind of Structure.

Now, becauſe they are oftner, both for Beauty and Majeſty, found arched than otherwiſe, I am here orderly led to ſpeak of Arches, and under the ſame Head of Vaults; for an Arch is nothing indeed but a contracted Vault, and a Vault is but a dilated Arch; therefore to handle this Piece both compendiouſly and fundamentally, I will reſolve the whole Buſineſs into a few *Theorems*.

THEOREM I.

All ſolid Materials free from Impediment, do deſcend perpendicularly downwards, becauſe Ponderoſity is a natural Inclination to the Center of the World, and Nature performeth her Motions by the ſhorteſt Lines.

THEOREM II.

Bricks moulded in their ordinary Rectangular form, if they ſhall be laid one by another in a level Row, between any Supporters ſuſtaining the two Ends, then all the Pieces between, will neceſſarily ſink, even by their own natural Gravity, and much more if they ſuffer any Depreſſion by other Weight above them, becauſe their Sides being parallel, they have room to deſcend perpendicularly, without Impeachment, according to the former Theorem; therefore to make them ſtand, we muſt either change their Poſture, or their Figure, or both.

THEOREM III.

If Bricks moulded, or Stones ſquared *Cuneatim* (that is, Wedge-wiſe, broader above than below) ſhall be laid in a Row level, with their Ends ſupported, as in the precedent Theorem, pointing all to one Center; then none of the Pieces between can ſink till the Supporters give way, becauſe they want room in that Figuration to deſcend perpendicularly. But this is yet a weak Piece of Structure, becauſe the Supporters are ſubject to much Impulſion, eſpecially if the Line be long; for which Reaſon this Form is ſeldom uſed, but over Windows or narrow Doors. Therefore to fortify the Work, as in this Third Theorem, we have ſuppoſed the Figure of all the Materials different from thoſe in the Second: So likewiſe we muſt now change the Poſture, as will appear in the Theorem following.

THEOREM IV.

If the Materials figured as before Wedge-wiſe, ſhall not be diſpoſed levelly, but in Form of ſome Arch or Proportion of a Circle, pointing all to the ſame Center. In this Caſe, neither the Pieces of the ſaid Arch can ſink

downwards, through want of room to descend * perpendicularly; nor the Supporters or Butments (as they are termed) of the said Arch can suffer so much Violence, as in the precedent flat Posture, for the Roundness will always make the incumbent Weight, rather to rest upon the Supporters than to shove them. Whence may be drawn an evident *Corallary*; that the safest of all Arches is the Semicircular, and of all Vaults the Hemisphere, though not absolutely exempted from some natural Weakness, † as *Barnardino Baldi*, Abbot of *Guastalla*, in his Commentary upon *Aristotle*'s *Mechanicks*, doth very well prove; where let me note by the way, that when any thing is mathematically demonstrated weak, it is much more mechanically weak, Errors ever occurring more easily in the Management of gross Materials, than lineal Designs.

THEOREM V.

As Semicircular Arches, or Hemispherical Vaults, being raised upon the total Diameter, be of all other the roundest, and consequently the securest, by the precedent *Theorem*: So those are the gracefullest, which keeping precisely the same Height, shall yet be distended one fourteenth Part longer than the said entire Diameter; which Addition of Distent will confer much to their Beauty, and detract but little from their Strength.

This Observation I find in *Leon Baptista Alberti*; but the Practice how to preserve the same Height, and yet distend the Arms or Ends of the Arch, is in *Alberty Durer*'s Geometry, who taught the *Italians* many an excellent Line, of great Use in this Art.

Upon these five *Theorems* all the Skill of Arching and Vaulting is grounded: As for those Arches, which our Artisans call of the third and fourth Point; and the *Tuscan* Writers *di terzo*, and *di quarto acuto*; because they always concur in an acute Angle, and do spring from division of the Diameter, into three, four, or more parts at pleasure; I say, such as these, both from the natural Imbecility of the sharp Angle itself, and likewise for their very Uncomelinesss, ought to be exiled from judicious Eyes, and left to their first Inventors, the *Goths* or *Lombards*, amongst other Reliques of that barbarous Age.

Thus of my first Partition of the Parts of every Fabrick, into five Heads, having gone through the two former, and been incidently carried into this last Doctrine touching Arches and Vaults. The next now in order, are the Apertions, under which Term I do comprehend Doors, Windows, Stair-Cases, Chimnies, or other Conducts; in short, all Inlets or Oulets, to which belong two general Cautions.

First, That they be as few in Number, and as moderate in Dimension, as may possibly consist with other due Respects; for in a word, all Openings are Weakenings.

Secondly, That they do not approach too near the Angles of the Walls; for it were indeed a most essential Solecism to weaken that Part which must strengthen all the rest: A Precept well recorded, but ill practised by the *Italians* themselves, particularly at *Venice*, where I have observed divers *Pergoli*, or

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* *By the first Theorem.* † *Which is the sole Prerogative of Perpendicular Lines and Right Angles.*

or *Meniana* (as *Vitruvius* ſeemeth to call them, which are certain balliſed Outſtandings to ſatisfy Curioſity of Sight) very dangerouſly ſet forth, upon the very Point it ſelf of the Mural Angle.

Now, albeit I make haſte to the caſting and comparting of the whole Work, (being indeed the very definitive Sum of this Art, to diſtribute uſefully and gracefully a well-choſen Plot) yet I will firſt under their ſeveral Heads, collect briefly ſome of the choiceſt Notes belonging to theſe particular Overtures.

Of DOORS *and* WINDOWS.

These Inlets of Men and of Light, I couple together, becauſe I find their due Dimenſions brought under one Rule, by *Leon Alberti* (a learned Searcher) who from the School of *Pythagoras* (where it was a fundamental Maxim, That the Images of all Things are latent in Numbers) doth determine the comelieſt Proportion between Breadths and Heights, reducing Symmetry to Symphony, and the Harmony of Sound, to a kind of Harmony in Sight, after this manner: The two principal Conſonances that moſt raviſh the Ear, are by conſent of all Nature, the *Fifth* and the *Octave*; whereof the firſt riſeth radically, from the Proportion between two and three. The other from the double Interval, between one and two, or between two and four, *&c.* Now, if we ſhall tranſport theſe Proportions, from audible to viſible Objects, and apply them as they ſhall fall fitteſt, (the Nature of the Place conſidered) namely in ſome Windows and Doors, the Symmetry of two to three in their Breadth and Length; in others the double, as aforeſaid, there will indubitably reſult from either, a graceful and harmonious Contentment to the Eye; which Speculation, though it may appear unto vulgar Artizans, perhaps, too ſubtile, and too ſublime, yet we muſt remember, that *Vitruvius* himſelf doth determine many Things in his Profeſſion by Muſical Grounds, and much commendeth in an *Architect*, a Philoſophical Spirit; that is, he would have him (as I conceive it) to be no ſuperficial and floating Artificer, but a Diver into Cauſes, and into the Myſteries of Proportion. Of the Ornaments belonging both to Doors and Windows, I ſhall ſpeak in another Place; but let me here add one Obſervation, That our Maſter (as appeareth by divers Paſſages, and particularly, *Lib.* 6. *Cap.* 9.) ſeems to have been an extreme lover of luminous Rooms: And indeed, I muſt confeſs, that a frank Light can misbecome no Edifice whatſoever, Temples only excepted, which were anciently dark, as they are likewiſe at this Day in ſome Proportion; *Devotion more requiring collected than diffuſed Spirits.** Yet on the other Side, we muſt take heed to make a Houſe (though but for civil Uſe) all Eyes, like *Argus*, which in Northern Climes would be too cold, in Southern too hot: And therefore the matter indeed importeth more than a merry Compariſon. Beſides, there is no Part of Structure either more expenceful than Windows, or more ruinous; not only for that vulgar Reaſon, as being expoſed to all Violence of Weather, but becauſe conſiſting of ſo different and unſociable Pieces, as Wood,

* Lumen eſt diffuſium ſui & alieni.

Wood, Iron, Lead, and Glaſs, and thoſe ſmall and weak, they are eaſily ſhaken. I muſt likewiſe remember one Thing (though it be but a *Grammatical* Note) touching Doors. Some were *Fores*, and ſome were *Valvæ*; thoſe (as the very Word may ſeem to import) did open outwards, theſe inwards; and were commonly of two Leaves or Panes, (as we call them) thereby requiring indeed a leſſer Circuit in their unfolding, and therefore much in Uſe among *Italians* at this Day: But I muſt charge them with an Imperfection, for though they let in as well as the former, yet they keep out worſe.

Of Stair-Cases.

To make a compleat Stair-Caſe is a curious Piece of *Architecture*: The vulgar Cautions are theſe;

That it have a very liberal Light, againſt all Caſualty of Slips and Falls.

That the Space above the Head be large and airy, which the *Italians* uſe to call *Un bel-ſfogolo*, as it were good Ventilation, becauſe a Man doth ſpend much Breath in mounting.

That the half Paces be well diſtributed, at competent Diſtances, for reposing on the Way.

That to avoid Encounters, and beſides to gratify the Beholder, the whole Stair-Caſe have no nigard Latitude, that is, for the principal Aſcent, at leaſt ten Foot in royal Buildings.

That the Breadth of every ſingle Step or Stair, be never leſs than one Foot, nor more than eighteen Inches.

That they exceed by no means half a Foot in their Height or Thickneſs, for our Legs do labour more in Elevation than in Diſtention: Theſe, I ſay, are familiar Remembrances, to which let me add,

That the Steps be laid where they join *Con un tantino di ſcarpa*; we may tranſlate it ſomewhat ſloaping, that ſo the Foot may in a ſort both aſcend and deſcend together, which though obſerved by few, is a ſecret and delicate Deception of the Pains in mounting.

Laſtly, To reduce this Doctrine to ſome Natural, or leaſt Mathematical Ground, (our Maſter, as we ſee, *Lib.* 9. *Cap.* 2.) borroweth thoſe Proportions that make the Sides of a rectangular Triangle, which the antient School did expreſs in loweſt Terms, by the Numbers of Three, Four, and Five; that is, Three for the Perpendicular, from the Stair-head to the Ground, Four for the Ground-Line it ſelf, or Receſſion from the Wall; and Five for the whole Inclination or Slopeneſs in the Aſcent; which Proportion, *ſaith he*, will make *Temperatas graduum liberationes*. Hitherto of Stair-Caſes which are direct: There are likewiſe Spiral, or Cockle Stairs, either circular or oval, and ſometimes running about a Pillar, ſometimes vacant, wherein *Palladio*, (a Man in this Point of ſingular Felicity) was wont to divide the Diameter of the firſt Sort into three Parts, yielding one to the Pillar, and two to the Steps: Of the ſecond into four, whereof he gave two to the Stairs, and two to the Vacuity, which had all their Light from above; and this in exact Ovals, is a Maſterpiece.

Of

Of Chimnies.

In the preſent Buſineſs, *Italians* (who make very frugal Fires) are perchance not the beſt Counſellors. Therefore from them we may better learn both how to raiſe fair *Mantels* within the Rooms, and how to diſguiſe gracefully the Shafts of Chimnies abroad (as they uſe) in ſundry Forms (which I ſhall handle in the latter Part of my Labour) and the reſt I will extract from *Philippe de l'Orme*, in this Part of his Work more diligent, than in any other, or, to do him right, than any Man elſe.

Firſt, He obſerveth very ſoberly, that who in the Diſpoſition of any Building will conſider the Nature of the Region, and the Winds that ordinarily blow from this or that Quarter, might ſo caſt the Rooms which ſhall moſt need Fire, that he ſhould little fear the Incommodity of Smoak, and therefore he thinks that Inconvenience for the moſt part to proceed from ſome inconſiderate Beginning. Or if the Error lay not in the Diſpoſition, but in the Structure it ſelf, then he makes a Logical Enquiry, That either the Wind is too much let in above, at the Mouth of the Shaft, or the Smoak ſtifled below: If none of theſe, then there is a Repulſion of the Fume by ſome higher Hill or Fabrick, that ſhall over-top the Chimney, and work the former Effect: If likewiſe not this, then he concludes, That the Room which is infeſted, muſt be neceſſarily both little and cloſe, ſo as the Smoak cannot iſſue by a natural Principle, wanting a Succeſſion and Supply of new Air.

Now, in theſe Caſes he ſuggeſteth divers artificial Remedies, of which I will allow one, a little Deſcription, becauſe it ſavoureth of Philoſophy, and was touched by *Vitruvius* himſelf, *Lib.* 1. *Cap.* 6. but by this Man ingeniouſly applied to the preſent Uſe: He will have us provide two hollow Braſs Balls of reaſonable Capacity, with little Holes open in both for Reception of Water, when the Air ſhall be firſt ſucked out: One of theſe we muſt place with the Hole upwards, upon an Iron Wire, that ſhall traverſe the Chimney, a little above the *Mantel*, at the ordinary Height of the ſharpeſt Heat or Flames, whereof the Water within being rarified, and by Rarifaction reſolved into Wind, will break out, and ſo force up the Smoak, which otherwiſe might linger in the Tunnel by the way, and oftentimes revert: With the other, (*ſaith he*) we may ſupply the Place of the former, when it is exhauſted, or for a need, blow the Fire in the mean while; which Invention I have interpoſed for ſome little Entertainment of the Reader. I will conclude with a Note from *Palladio*, who obſerveth, that the Antients did warm their Rooms with certain ſecret Pipes, that came through the Walls, tranſporting Heat (as I conceive it) to ſundry Parts of the Houſe, from one common Furnace; I am ready to baptize them *Caliducts*, as well as they are termed *Ventiducts* and *Aquæducts*, that convey Wind and Water; which whether it were a Cuſtom or a Delicacy, was ſurely both for Thrift and for Uſe, far beyond the *German* Stoves; and I ſhould prefer it likewiſe before our own Faſhion, if the very Sight of a Fire did not add to the Room a kind of Reputation, as old * *Homer* doth teach us in a Verſe, ſufficient to prove that himſelf was not blind, as ſome would lay to his Charge.

* Αἰθουσὴν ἣ πυρὸς μεγάροιο δόμοιο ἰδέσθαι. Hom. Epig

Touching Conducts for the Stillage, and other Neceſſities of the Houſe, (which how baſe ſoever in Uſe, yet for Health of the Inhabitants are as conſiderable, and perhaps more than the reſt) I find in our Authors this Counſel, That Art ſhould imitate Nature in thoſe ignoble Conveyances, and ſeparate them from Sight, (where there wants a Running Water) into the moſt remote, and loweſt, and thickeſt Part of the Foundation, with ſecret Vents paſſing up through the Walls like a Tunnel to the wild Air aloft, which all *Italian* Artizans commend for the diſcharge of noiſome Vapours, though elſewhere, to my Knowledge, little practiſed.

Thus having conſidered the precedent Appertions, or Overtures, in Severalty, according to their particular Requiſites, I am now come to the Caſting and Contexture of the whole Work, comprehended under the Term of Compartition; into which (being the maineſt Piece) I cannot enter without a few general Precautions, as I have done in other Parts.

Firſt, therefore, let no Man that intendeth to build, ſettle his Fancy upon a Draught of the Work in Paper, how exactly ſoever meaſured, or neatly ſet off in Perſpective; and much leſs upon a bare Plant thereof, as they call the *Schiographia*, or Ground-Lines, without a Model or Type of the whole Structure, and of every Parcel and Partition in Paſtboard or Wood.

Next, that the ſaid Model be as plain as may be, without Colours or other Beautifying, leaſt the Pleaſure of the Eye preocupate the Judgement; which Advice, omitted by the *Italian Architects*, I find in *Philippe de l'Orme*, and therefore (though *France* be not the Theatre of beſt Buildings) it did merit ſome mention of his Name.

Laſtly, The bigger that this Type be, it is ſtill the better; not that I will perſwade a Man to ſuch an Enormity, as that Model made by *Antonio Labaco*, of St. *Peter*'s Church in *Rome*, containing Twenty-two Foot in Length, Sixteen in Breadth, and Thirteen in Heighth, and coſting Four thouſand One hundred and eighty four Crowns, the Price in truth of a reaſonable Chapel. Yet in a Fabrick of ſome Forty or Fifty Thouſand Pounds Charge, I wiſh Thirty Pounds at leaſt laid out before-hand in an exact Model; for a little Miſery in the Premiſes, may eaſily breed ſome Abſurdity of greater Charge in the Concluſion.

Now, after theſe Premoniſhments, I will come to the Compartition it ſelf; by which the Authors of this Art (as hath been touched before) do underſtand a graceful and uſeful Diſtribution of the whole Ground-Plot, both for Rooms of Office, and of Reception or Entertainment, as far as the Capacity thereof, and the Nature of the Country will comport. Which Circumſtances in the preſent Subject, are all of main Conſideration, and might yield more Diſcourſe than an elemental Rhapſody will permit. Therefore (to anatomize briefly this Definition) the Gracefulneſs (whereof we ſpeak) will conſiſt in double Analogy or Correſpondency. *Firſt*, between the Parts and the Whole, whereby a great Fabrick ſhould have great Partitions, great Lights, great Entrances, great Pillars or Pilaſters; in ſum, all the Members great. The next, between the Parts themſelves, not only conſidering their Breadths and Lengths, as before, when we ſpeak of Doors and Windows; but here likewiſe enters a third reſpect of Height, a Point (I muſt confeſs) hardly reduceable to any general Precept.

True

True it is, that the Antients did determine the Longitude of all Rooms, which were longer than broad, by the Double of their Latitude. *Vitruvius, Lib.* 6. *Cap.* 5. And the Height by the half of the Breadth and Length ſummed together. But when the Room was preciſely ſquare, they made the Height half as much more as the Latitude; which Dimenſions the modern *Architects* have taken leave to vary upon Diſcretion: Sometimes ſquaring the Latitude, and then making the *Diagonial*, or overthwart Line, from Angle to Angle, of the ſaid Square, the Meaſure of the Height ſometimes more, but ſeldom lower than the full Breadth it ſelf; which Boldneſs of quitting the old Proportions, ſome attribute firſt to *Michael Angelo da Buonaroti*, perchance upon the Credit he had before gotten in two other Arts.

The ſecond Point is Uſefulneſs, which will conſiſt in a ſufficient Number of Rooms of all Sorts, and in their apt Coherence, without Diſtraction, without Confuſion; ſo as the Beholder may not only call it, *Una Fabrica ben raccolta*, as *Italians* uſe to ſpeak of well-united Works, but likewiſe that it may appear airy and ſpiritous, and fit for the Welcome of cheerful Gueſts; about which the principal Difficulty will be in contriving the Lights and Stair-Caſes, whereof I will touch a Note or two: For the firſt, I obſerve, that the antient *Architects* were at much Eaſe; for both the *Greeks* and *Romans* (of whoſe private Dwellings *Vitruvius* hath left us ſome Deſcription) had commonly two cloiſtered open Courts, one ſerving for the Womens Side, and the other for the Men; who yet, perchance, now-a-days would take ſo much Separation unkindly. Howſoever, by this Means the Reception of Light into the Body of the Building, was very prompt, both from without and from within; which we muſt now ſupply, either by ſome open Form of the Fabrick, or among graceful Refuges, by Tarraſing any Story which is in danger of Darkneſs; or laſtly, by perpendicular Lights from the Roof, of all other the moſt natural, as ſhall be ſhewed anon. For the ſecond Difficulty, which is caſting of the Stair-Caſes, that being in it ſelf no hard Point, but only as they are Incumbrances of Room for other Uſe; (which Lights were not) I am therefore aptly moved here to ſpeak of them. And firſt of Offices.

I have marked a Willingneſs in the *Italian* Artizans, to diſtribute the Kitchen, Pantry, Bakehouſe, Waſhing-Rooms, and even the Buttery likewiſe, under Ground, next above the Foundation, and ſometimes level with the Plain or Floor of the Cellar, raiſing the firſt Aſcent into the Houſe fifteen Foot or more for that End, which beſides the Benefit of removing ſuch Annoys out of Sight, and the gaining of ſo much more Room above, doth alſo by Elevation of the Front, add Majeſty to the whole Aſpect. And with ſuch a Diſpoſition of the principal Stair-Caſe, which commonly doth deliver us into the Plain of the ſecond Story, there may be Wonders done with a little Room, whereof I could alledge brave Examples Abroad; and none more artificial and delicious than a Houſe built by *Daniel Barbaro*, Patriarch of *Aquileia* before-mentioned, among the memorable Commenters upon *Vitruvius*. But the Definition (above-determined) doth call us to ſome Conſideration of our own Country, where, though all the other Petty-Offices (before rehearſed) may well enough be ſo remote, yet by the natural Hoſpitality of *England*, the Buttery muſt be more viſible, and we need perchance

for

for our Ranges, a more ſpacious and luminous Kitchen than the foreſaid Compartition will bear, with a more competent nearneſs likewiſe to the Dining-Room; or elſe, beſides other Inconveniencies, perhaps ſome of the Diſhes may ſtraggle by the way. Here let me note a common Defect that we have of a very uſeful Room, called by the *Italians*, *Il Tinello*; and familiar, nay, almoſt eſſential, in all their great Families: It is a Place properly appointed to conſerve the Meat that is taken from the Table, till the Waiters eat, which with us by an old Faſhion, is more unſeemly ſet by in the mean while.

Now touching the Diſtribution of Lodging-Chambers; I muſt here take leave to reprove a Faſhion, which I know not how hath prevailed through *Italy*, though without ancient Examples, as far as I can perceive by *Vitruvius*. The Thing I mean, is, that they ſo caſt their Partitions, as when all Doors are open, a Man may ſee through the whole Houſe; which doth neceſſarily put an intolerable Servitude upon all the Chambers, ſave the inmoſt, where none can arrive but through the reſt; or elſe the Walls muſt be extreme thick for ſecret Paſſages. And yet this alſo will not ſerve the Turn, without at leaſt three Doors to every Room; a Thing moſt inſufferable in cold and windy Regions, and every where no ſmall weakening to the whole Work: Therefore with us, that want no cooling, I cannot commend the direct Oppoſition of ſuch Overtures, being indeed meerly grounded upon the fond Ambition of diſplaying to a Stranger all our Furniture at one Sight, which therefore is moſt maintained by them that mean to harbour but a few; whereby they make only Advantage of the Vanity, and ſeldom prove the Inconvenience. There is likewiſe another Defect (as Abſurdities are ſeldom ſolitary) which will neceſſarily follow, upon ſuch a ſervile diſpoſing of inward Chambers, that they muſt be forced to make as many common great Rooms, as there ſhall be ſeveral Stories; which (beſides that they are uſually dark, a Point hardly avoided, running as they do, through the middle of the whole Houſe) do likewiſe devour ſo much Place, that thereby they want other Galleries and Rooms of Retreat, which I have often conſidered among them (I muſt confeſs) with no ſmall Wonder; for I obſerve no Nation in the World by Nature more private and reſerved than the *Italian*, and on the other ſide, in no Habitations leſs Privacy; ſo as there is a kind of Conflict between their Dwelling and their Being. It might here perchance be expected, that I ſhould at leaſt deſcribe (which others have done in Draughts and Deſigns) divers Forms of Plants and Partitions, and Varieties of Inventions. But ſpeculative Writers (as I am) are not bound to compriſe all particular Caſes within the Latitude of the Subject which they handle, general Lights and Directions, and Pointings at ſome Faults is ſufficient: The reſt muſt be committed to the Sagacity of the *Architect*, who will be often put to divers ingenious Shifts, when he is to wreſtle with Scarcity of Ground. As ſometimes * to damn one Room (though of ſpeciall Uſe) for the Benefit and Beauty of all the reſt; another while, to make thoſe faireſt, which are moſt in Sight; and to leave the other (like

* *The* Italians *call it* Una ſtanza dannata, *as when a Buttery is caſt under a Stair-Caſe, or the like.*

(like a cunning Painter) in Shadow, *cum multis aliis*, which it were infinite to purſue. I will therefore cloſe this Part touching Compartition, as cheerfully as I can, with a ſhort Deſcription of a Feaſting or Entertaining Room, after the *Egyptian* Manner, who ſeem (at the leaſt till the Time of *Vitruvius*) from the ancient *Hebrews* and *Phenicians* (whence all Knowledge did flow) to have retained, with other Sciences, in a high Degree, alſo the Principles and Practice of this magnificent Art. For as far as I may conjecture by our Maſter's Text, *Lib.* 6. *Cap.* 5. where (as in many other Places he hath tortured his Interpreters) there could no Form, for ſuch a Royal Uſe, be comparably imagined, like that of the aforeſaid Nation, which I ſhall adventure to explain.

Let us conceive a Floor or *Area* of goodly Length, (for Example, at leaſt of One hundred and twenty Foot) with the Breadth ſomewhat more than the half of the Longitude, whereof the Reaſon ſhall be afterwards rendred. About the two longeſt Sides, and Head of the ſaid Room, ſhall run an Order of Pillars, which *Palladio* doth ſuppoſe *Corinthian* (as I ſee by his Deſign) ſupplying that Point out of *Greece*, becauſe we know no Order proper to *Egypt*. The fourth Side I will leave free for the Entrance: On the foreſaid Pillars was laid an Architrave, which *Vitruvius* mentioneth alone: *Palladio* adds thereunto (and with Reaſon) both Freeze and Cornice, over which went up a continued Wall, and therein, half or three quarter Pillars, anſwering directly to the Order below, but a fourth Part leſs, and between theſe half Columns above, the whole Room was Windowed round about.

Now, from the loweſt Pillars there was laid over a Contignation or Floor, born upon the outward Wall, and the Head of the Columns with Terrace and Pavement, *Sub dio* (ſaith our Maſter) and ſo indeed he might ſafely determine the matter in *Egypt*, where they fear no Clouds: Therefore *Palladio* (who leaveth this Terrace uncovered in the middle, and balliſed about) did perchance conſtrue him rightly, though therein diſcording from others: Always we muſt underſtand a ſufficient Breadth of Pavement left between the open Part and the Windows, for ſome Delight of Spectators that might look down into the Room: The Latitude I have ſuppoſed contrary to ſome former Poſitions, a little more than the half of the Length; becauſe the Pillars ſtanding at a competent Diſtance from the outmoſt Wall, will, by Interception of the Sight, ſomewhat in Appearance diminiſh the Breadth; in which Caſes (as I have touched once or twice before) Diſcretion may be more licentious than Art. This is the Deſcription of an *Egyptian* Room, for Feaſts and other Jollities. About the Walls whereof we muſt imagine entire Statues, placed below, and illuminated by the deſcending Light from the Terrace, as likewiſe from the Windows between the half Pillars above: So as this Room had abundant and advantageous Light; and beſides other garniſhing, muſt needs receive much State by the very Height of the Roof, that lay over two Orders of Columns: And ſo having run through the four Parts of my firſt general Diviſion, namely, *Foundation*, *Walls*, *Appertions*, and *Compartition*, the Houſe may now have leave to put on his Hat; having hitherto been uncovered it ſelf, and conſequently unfit to cover others. Which Point, though it be the laſt of this Art in Execution, yet it is always in Intention the firſt, for who would build, but for Shelter? Therefore

obtaining both the Place, and the Dignity of a final Cauſe, it hath been diligently handled by diverſe, but by none more learnedly than *Bernardino Baldi*, Abbot of *Guaſtalla* (before cited upon other Occaſion) who doth fundamentally and mathematically demonſtrate the firmeſt Knittings of the upper Timbers, which make the Roof. But it hath been rather my Scope, in theſe *Elements*, to fetch the Ground of all from Nature her ſelf, which indeed is the ſimpleſt Mother of Art. Therefore I will now only deliver a few of the propereſt, and (as I may ſay) of the naturaleſt Conſiderations that belong to this remaining Piece.

There are two Extremities to be avoided in the Cover or Roof: That it be not too heavy, nor too light. The firſt will ſuffer a vulgar Objection of preſſing too much the under Work. The other containeth a more ſecret Inconvenience; for the Cover is not only a bare Defence, but likewiſe a kind of Band or Ligature to the whole Fabrick, and therefore would require ſome reaſonable Weight. But of the two Extremes, a Houſe Top-heavy is the worſt. Next there muſt be a Care of Equality, that the Edifice be not preſſed on the one Side more than on the other; and here *Palladio* doth wiſh (like a cautelous Artizan) that the inward Walls might bear ſome good ſhare in the Burthen, and the outward be the leſs charged.

Thirdly, The *Italians* are very preciſe in giving the Cover a graceful Pendence or Slopeneſs, dividing the whole Breadth into nine Parts; whereof two ſhall ſerve for the Elevation of the higheſt Top or Ridge, from the loweſt. But in this Point the Quality of the Region is conſiderable: For (as our *Vitruvius* inſinuateth) thoſe Climes that fear the falling and lying of much Snow, ought to provide more inclining *Pentices*; and Comelineſs muſt yield to Neceſſity.

Theſe are the uſefulleſt Cautions which I find in Authors, touching the laſt Head of our Diviſion, wherewith I will conclude the firſt Part of my preſent Travail. The ſecond remaineth, concerning Ornaments within, or without the Fabrick: A Piece not ſo dry as the meer Contemplation of Proportions. And therefore I hope therein, ſomewhat to refreſh both the Reader and my ſelf.

THE

THE ELEMENTS OF ARCHITECTURE.

PART II.

EVERY Man's proper Manſion Houſe and Home, being the Theatre of his Hoſpitality, the Seat of Self-Fruition, the comfortableſt Part of his own Life, the nobleſt of his Son's Inheritance, a kind of private Princedom; nay, to the Poſſeſſors thereof, an Epitomy of the whole World; may well deſerve by theſe Attributes, according to the Degree of the Maſter, to be decently and delightfully adorned. For which End, there are two Arts attending on *Architecture*, like two of her principal Gentlewomen, to dreſs and trim their Miſtreſs, *Picture* and *Sculpture*; between whom, before I proceed any farther, I will venture to determine an ancient Quarrel about their Precedency, with this Diſtinction; that in the garniſhing of Fabricks, *Sculpture* no doubt muſt have the Pre-eminence, as being indeed of nearer Affinity to *Architecture* it ſelf, and conſequently the more natural, and more ſuitable Ornament. But on the other Side, (to conſider theſe two Arts, as I ſhall do Philoſophically, and not Mechanically) an excellent Piece of Painting, is to my Judgment the more admirable Object, becauſe it comes near an artificial Miracle; to make divers diſtinct Eminencies appear upon a Flat by force of Shadows, and yet the Shadows themſelves not to appear; which I conceive to be the uttermoſt Value and Vertue of a Painter, and to which very few have arrived in all Ages.

In theſe two Arts (as they are appliable to the Subject which I handle) it ſhall be fit firſt to conſider how to chooſe them; and next, how to diſpoſe them. To guide us in the Choice, we have a Rule ſomewhere (I well remember) in *Pliny*, and it is a pretty Obſervation, That they do mutually help to cenſure one another. For *Picture* is beſt, when it ſtandeth off, as if it were carved; and *Sculpture* is beſt, when it appeareth ſo tender, as if it were painted; I mean, when there is ſuch a ſeeming Softneſs in the Limbs, as if not a Chiſſel had hewed them out of Stone, or other Material, but a Penſil

Penſil had drawn and ſtroaked them in Oil, which the judicious Poet took well to his Fancy.

Excudent alij ſpirantia mollius æra.

But this Generality is not ſufficient to make a good Chuſer, without a more particular Contraction of his Judgment. Therefore, when a Piece of Art is ſet before us, let the firſt Caution be, not to ask who made it, leaſt the Fame of the Author do captivate the Fancy of the Buyer: For, that excellent Men do always excellently, is a falſe Concluſion; whereupon I obſerve among *Italian* Artizans, three notable Phraſes, which well decipher the degrees of their Works.

They will tell you, that a Thing was done *Con diligenza*, *Con ſtudio*, and *Con amore*: The firſt, is but a bare and ordinary Diligence; the ſecond, is a learned Diligence; the third, is much more, even a loving Diligence; they mean not with Love to the Beſpeaker of the Work, but with a Love and Delight in the Work it ſelf, upon ſome ſpecial Fancy to this or that Story; and when all theſe concur (particularly the laſt) in an eminent Author, then perchance *Titianus Fecit*, or ὁρίστας ἐποιει, will ſerve the turn, without farther Inquiſition: Otherwiſe, Artizans have not only their Growths and Perfections, but likewiſe their *Vains* and Times.

The next Caution muſt be (to proceed Logically) that in judging of the Work it ſelf, we be not diſtracted with too many Things at once: Therefore firſt (to begin with Picture) we are to obſerve whether it be well drawn, (or as more elegant Artizans term it) well deſign'd; then whether it be well coloured, which be the two general Heads; and each of them hath two principal Requiſites; for in well Deſigning, there muſt be Truth and Grace; in well Colouring, Force and Affection; all other Praiſes are but Conſequences of theſe.

Truth (as we metaphorically take it in this Art) is a juſt and natural Proportion in every Part of the determined Figure. Grace is a certain free Diſpoſition in the whole Draught, anſwerable to that unaffected Frankneſs of Faſhion in a living Body, Man or Woman, which doth animate Beauty where it is, and ſupply it, where it is not.

Force conſiſteth in the Roundings and Raiſings of the Work, according as the Limbs do more or leſs require it; ſo as the Beholder ſhall ſpy no Sharpneſs in the bordering Lines; as when Taylors cut out a Suit, which *Italians* do aptly term according to that Compariſon, *Contorni taglienti*; nor any Flatneſs within the Body of the Figure, which how it is done, we muſt fetch from a higher Diſcipline; for the Opticks teach us, That a Plane will appear prominent, and (as it were) emboſſed, if the Parts fartheſt from the Axeltree, or middle Beam of the Eye, ſhall be the moſt ſhadowed: becauſe in all Darkneſs there is a kind of Deepneſs. But as in the Art of Perſwaſion, one of the moſt fundamental Precepts is, the Concealment of Art; ſo here likewiſe, the Sight muſt be ſweetly deceived by an inſenſible Paſſage, from brighter Colours to dimmer, which *Italian* Artizans call the middle Tinctures; that is, not as the Whites and Yelks of Eggs lie in the Shell, with viſible Diſtinction; but as when they are beaten and blended in a Diſh; which is the neareſt Compariſon that I can ſuddenly conceive.

Laſtly,

Laſtly, Affection is the lively Repreſentment of any Paſſion whatſoever, as if the Figures ſtood not upon a Cloth or Board, but as if they were acting upon a Stage: And here I muſt remember, in truth with much marvel, a Note, which I have received from excellent Artizans, that though Gladneſs and Grief be Oppoſites in Nature, yet they are ſuch Neighbours and Confiners in Art, that the leaſt Touch of a Penſil will tranſlate a * Crying into a Laughing Face; which Inſtance, beſides divers other, doth often reduce unto my Memory, that ingenious Speculation of the Cardinal *Cuſanus*, extant in his Works, touching the Coincidence of Extremes. And thus much of the four *Requiſites* and *Perfections* in *Picture*.

In *Sculpture* likewiſe, the two firſt are abſolutely neceſſary, the third impertinent; for ſolid Figures need no Elevation, by Force of Lights or Shadows: Therefore in the Room of this, we may put (as hath been before touched) a kind of Tenderneſs, by the *Italians* termed *Morbidezza*, wherein the Chiſſel, I muſt confeſs, hath more Glory than the Penſil, that being ſo hard an Inſtrument, and working upon ſo unpliant Stuff, can yet leave Stroaks of ſo gentle Appearance.

The fourth, which is the expreſſing of Affection (as far as it doth depend upon the Activity and Geſture of the Figure) is as proper to the Carver as to the Painter, though Colours, no doubt, have therein the greateſt Power; whereupon, perchance, did firſt grow with us the Faſhion of Colouring, even Regal Statues, which I muſt take leave to call an *Engliſh* Barbariſm.

Now in theſe four Requiſites already rehearſed, it is ſtrange to note, that no Artizan, having ever been blamed for Exceſs in any of the three laſt; only *Truth* (which ſhould ſeem the moſt innocent) hath ſuffered ſome Objection, and all Ages have yielded ſome one or two Artificers, ſo prodigiouſly exquiſite, that they have been reputed too natural in their Draughts; which will well appear, by a famous Paſſage in *Quintilian*, touching the Characters of the antient Artizans, falling now ſo aptly into my Memory, that I muſt needs tranſlate it, as in truth it may well deſerve.

The Place which I intend, is extant in the laſt Chapter ſave one of his whole Work, beginning thus in *Latin*:

Primi, quorum quidem opera non vetuſtatis modo gratia viſenda ſunt clari Pictores fuiſſe dicuntur, Polygnotus atque Aglaophon, &c.

The whole Paſſage in *Engliſh* ſtandeth thus:

THE firſt *Painters* of Name, whoſe Works be conſiderable for any thing more than only Antiquity, are ſaid to have been *Polygnotus* and *Aglaophon*, whoſe bare Colourings (he means I think in White and Black) hath even yet ſo many Followers, that thoſe rude and firſt Elements, as it were of that, which within a while became an Art, are preferred before the greateſt *Painters* that have been extant after them, out of a certain Competition (as I

ΙΛΙΑ Δ. ζ.
Ὡς εἰπὼν ἀλόχοιο φίλης ἐν χερσὶν ἔθηκε,
Παῖδ' ἑὸν, αὐτὰρ ἔπειτα μετὰ στονόεσσι δέξατο κόλπῳ
Ἀκχύσασ' γελάσασα.—— That is,
She took her Son into her Arms, weepingly laughing.

conceive it) in Point of Judgment. After theſe, *Zeuxes* and *Paraſius*, not far diſtant in Age, both about the Time of the *Peloponeſian* War, (for in *Xenophon* we have a Dialogue between *Paraſius* and *Socrates*) did add much to this Art. Of which the firſt is ſaid to have invented the due Diſpoſition of Lights and Shadows. The ſecond, to have more ſubtilly examined the Truth of Lines in the Draught; for *Zeuxes* did make Limbs bigger than the Life, deeming his Figures thereby the more ſtately and majeſtical, and therein (as ſome think) imitating *Homer*, whom the ſtouteſt Form doth pleaſe, even in Women. On the other Side, *Paraſius* did exactly limit all the Proportions ſo, as they call him the Law-giver; becauſe in the Images of the Gods, and of Heroical Perſonages, others have followed his Patterns like a Decree; but *Picture* did moſt flouriſh about the Days of *Philip*, and even to the Succeſſors of *Alexander*, yet by ſundry Habilities; for *Protogenes* did excel in Diligence; *Pamphilus* and *Melanthius*, in due Proportion; *Antiphilus*, in a frank Facility; *Theon* of *Samos*, in Strength of Fantaſie, and conceiving of Paſſions; *Apelles*, in Invention and Grace, whereof he doth himſelf moſt vaunt; *Euphranor* deſerves Admiration, that being in other excellent Studies a principal Man, he was likewiſe a wondrous Artizan both in *Painting* and *Sculpture*. The like Difference we may obſerve among the Statuaries; for the Works of *Calon* and *Egeſias* were ſomewhat ſtiff, like the *Tuſcan* manner; thoſe of *Calamis*, not done with ſo cold Stroaks; and *Myron*, more tender than the former; a diligent Decency in *Polycletus* above others, to whom though the higheſt Praiſe be attributed by the moſt, yet leaſt he ſhould go free from Exception, ſome think he wanted Solemneſs; for as he may perchance be ſaid to have added a comely Dimenſion to humane Shape, ſomewhat above the Truth; ſo, on the other Side, he ſeemed not to have fully expreſſed the Majeſty of the Gods: Moreover, he is ſaid not to have meddled willingly with the graver Age, as not adventuring beyond ſmooth Cheeks: But theſe Vertues that were wanting in *Polycletus*, were ſupplied by *Phidias* and *Alcmenes*; yet *Phidias* was a better Artizan in the repreſenting of Gods than of Men; and in his Works of Ivory, beyond all Emulation, even though he had left nothing behind him but his *Minerva* at *Athens*, or the *Olympian Jupiter* in *Elis*, whoſe Beauty ſeems to have added ſomewhat, even to the received Religion; the Majeſty of the Work, as it were, equalling the Deity. To Truth, they affirm *Lyſippus* and *Praxiteles* to have made the neareſt Approach; for *Demetrius* is therein reprehended, as rather exceeding than deficient, having been a greater Aimer at Likeneſs than at Lovelineſs.

This is that witty Cenſure of the antient Artizans, which *Quintilian* hath left us, where the laſt Character of *Demetrius* doth require a little Philophical Examination; How an Artificer, whoſe End is the Imitation of Nature, can be too natural; which likewiſe in our Days was either the Fault, or (to ſpeak more gently) the too much Perfection of *Albert Durer*, and perhaps alſo of *Michael Angelo da Buonarotti*, between whom I have heard noted by an ingenious Artizan, a pretty nice Difference, that the *German* did too much expreſs that which was; and the *Italian*, that which ſhould be: Which ſevere Obſervation of Nature, by the one in her commoneſt, and by the other in her abſoluteſt Forms, muſt needs produce in both a kind of *Rigidity*, and conſequently more Naturalneſs than Gracefulneſs: This is the cleareſt Reaſon,

ſon, why ſome exact Symmetriſts have been blamed for being too true, as near as I can deliver my Conceit. And ſo much touching the choice of *Picture* and *Sculpure*: The next is, the Application of both to the beautifying of Fabricks.

Firſt, therefore, touching *Picture*, there doth occur a very pertinent Doubt, which hath been paſſed over too ſlightly, not only by ſome Men, but by ſome Nations; namely, whether this Ornament can well become the Outſide of Houſes; wherein the *Germans* have made ſo little Scruple, that their beſt Towns are the moſt painted, as *Auguſta* and *Noremberg*. To determine this Queſtion in a word: It is true, that a Story well ſet out with a good Hand, will every where take a judicious Eye: But yet withal it is as true, that various Colours on the Out-Walls of Buildings, have always in them more Delight than Dignity: Therefore I would there admit no Paintings but in Black and White, nor even in that kind any Figures (if the Room be capable) under nine or ten Foot High, which will require no ordinary Artizan; becauſe the Faults are more viſible than in ſmall Deſigns. In unfigured Paintings, the nobleſt is, the Imitation of Marbles, and of *Architecture* it ſelf, as *Arches*, *Treezes*, *Columns*, and the like.

Now for the Inſide, here grows another Doubt, whether *Groteſca* (as the *Italians*) or *Antique* Work (as we call it) ſhould be received, againſt the expreſs Authority of *Vitruvius* himſelf, *Lib. 7. Cap.* 5. where *Pictura* (ſaith he) *fit ejus, quod eſt, ſeu poteſt eſſe*; excluding by this ſevere Definition, all Figures compoſed of different Natures or Sexes; ſo as a *Syrene* or a *Centaur* had been intolerable in his Eye: But in this we muſt take leave to depart from our Maſter, and the rather, becauſe he ſpake out of his own Profeſſion, allowing *Painters* (who have ever been as little limited as *Poets*) a leſs Scope in their Imaginations, even than the graveſt *Philoſophers*, who ſometimes do ſerve themſelves of Inſtances, that have no Exiſtence in Nature; as we ſee in *Plato*'s *Amphisbœna*, and *Ariſtotle*'s *Hirco-Cervus*. And (to ſettle this Point) what was indeed more common and familiar among the *Romans* themſelves, than the Picture and Statue of *Terminus*, even one of their Deities? which yet if we well conſider, is but a Piece of *Groteſca*. I am for theſe Reaſons unwilling to impoveriſh that Art, though I could wiſh ſuch medly and motly Deſigns confined only to the Ornament of Freezes and Borders, their propereſt Place. As for other ſtoried Works upon Walls, I doubt our Clime be too yielding and moiſt for ſuch Garniſhment; therefore leaving it to the Dweller's Diſcretion, according to the Quality of his Seat, I will only add a Caution or two, about the diſpoſing of Pictures within.

Firſt, That no Room be furniſhed with too many, which in truth were a Surfeit of Ornament, unleſs they be Galleries, or ſome peculiar Repoſitory for Rarities of Art.

Next, that the beſt Pieces be placed not where there is the leaſt, but where there are the feweſt Lights; therefore not only Rooms windowed on both Ends, which we call thorough-lighted, but with two or more Windows on the ſame Side, are Enemies to this Art; and ſure it is, that no *Painting* can be ſeen in full Perfection, but (as all Nature is illuminated) by a ſingle Light.

Thirdly, That in the Placing there be ſome Care alſo taken, how the *Painter* did ſtand in the Working, which an intelligent Eye will eaſily diſcover, and that Poſture is the moſt natural; ſo as *Italian* Pieces will appear beſt in a Room where the Windows are high; becauſe they are commonly made to a deſcending Light, which of all other doth ſet off Men's Faces in their trueſt Spirit.

Laſtly, That they be as properly beſtowed for their Quality, as fitly for their Grace; that is, cheerful Paintings in Feaſting and Banquetting-Rooms, graver Stories in Galleries, Landskips, and Boſcage, and ſuch wild Works in open Terraces, or in Summer-Houſes (as we call them) and the like.

And thus much of *Picture*, which let me cloſe with this Note, That though my former Diſcourſe may ſerve perchance for ſome reaſonable Leading in the choice of ſuch Delights; yet let no Man hope by ſuch a ſpeculative Erudition, to diſcern the maſterly and myſterious Touches of Art, but an Artizan himſelf; to whom therefore we muſt leave the Prerogative, to cenſure the manner and handling, as he himſelf muſt likewiſe leave ſome Points, perchance of no leſs value, to others; as for Example, whether the Story be rightly repreſented, the Figures in true Action, the Perſons ſuited to their ſeveral Qualities, the Affections proper and ſtrong, and ſuch like Obſervations.

Now for *Sculpture*, I muſt likewiſe begin with a Controverſy, as before (falling into this Place) or let me rather call it a very meer Fancy, ſtrangely taken by *Palladio*, who having noted in an old Arch or two at *Verona*, ſome part of the Materials already cut in fine Forms, and ſome unpoliſhed, doth conclude (according to his Logick) upon this Particular, that the Antients did leave the outward Face of their Marbles or Free-Stone, without any Sculpture, till they were laid and cemented in the Body of the Building; for which likewiſe he findeth a Reaſon (as many do now and then very wittily, even before the thing it ſelf be true) that the Materials being left rough, were more manageable in the *Maſon*'s Hand, than if they had been ſmooth; and that ſo the Sides might be laid together the more exactly; which Conceit, once taken, he ſeems to have farther imprinted, by marking in certain ſtoried *Sculptures* of old Time, how preciſely the Parts and Lines of the Figures, that paſs from one Stone to another, do meet; which he thinks could hardly fall out ſo right, (forgetting while he ſpeaks of ancient Things, the ancient Diligence) unleſs they had been cut, after the joining of the Materials. But all theſe Inducements cannot countervail the ſole Inconvenience of ſhaking and disjointing the *Commiſſures* with ſo many Strokes of the Chiſſel, beſides an incommodious Working on Scaffolds; eſpecially having no Teſtimony to confirm it, that I have yet ſeen, among the Records of Art: Nay, it is indeed rather true, that they did ſquare, and carve, and poliſh their Stone and Marble Works, even in the very Cave of the Quarry, before it was hardened by open Air: But (to leave Diſputation) I will ſet down a few poſitive Notes, for the *placing* of *Sculpture*; becauſe the *chuſing* hath been handled before.

That firſt of all, it be not too general and abundant, which would make a Houſe look like a Cabinet; and in this Point, Moral Philoſophy, which tempereth Fancies, is the Superintendant of Art.

That eſpecially, there be a due moderation of this Ornament in the firſt Approach; where our Authors do more commend (I mean about the principal Entrance) a *Dorick*, than a *Corinthian* Garniſhment; ſo as if the great Door be arched, with ſome brave Head cut in fine Stone or Marble for the Key of the Arch, and two incumbent Figures gracefully leaning upon it, towards one another, as if they meant to confer; I ſhould think this a ſufficient Entertainment for the firſt Reception of any judicious Sight, which I could wiſh ſeconded with two great ſtanding Statues on each ſide of a paved Way, that ſhall lead up into the Fabrick, ſo as the Beholder at the firſt entrance, may paſs his Eye between them.

That the Niches, if they contain Figures of white Stone or Marble, be not coloured in their Concavity too black; for though *Contraria juxta ſe poſita magis illuceſcunt* (by an old Rule) yet it hath been ſubtilly, and indeed truly noted, that our Sight is not well contented with thoſe ſudden Departments, from one extream to another; therefore let them have rather a duskiſh Tincture, then an abſolute Black.

That fine and delicate *Sculptures* be helped with Nearneſs, and Groſs with Diſtance; which was well ſeen in the old Controverſy between *Phidias* and *Alcmenes* about the Statue of *Venus*: Wherein the firſt did ſhew Diſcretion, and ſave Labour; becauſe the Work was to be viewed at good height, which did drown the ſweet and diligent Strokes of his Adverſary: A famous Emulation of two principal *Artizans*, celebrated even by the *Greek* Poets.

That in the placing of ſtanding Figures aloft, we muſt ſet them in a Poſture ſomewhat bowing forward; becauſe (ſaith our Maſter, *Lib.* 3. *cap.* 3. out of a better Art than his own) the viſual Beam of our Eye, extended to the Head of the ſaid Figures, being longer than to the Foot, muſt neceſſarily make that part appear farther; ſo as to reduce it to an erect or upright Poſition, there muſt be allowed a due advantage of ſtooping towards us; which *Albert Durer* hath exactly taught, in his forementioned *Geometry*. Our *Vitruvius* calleth this Affection in the Eye, a *Reſupination* of the Figure: For which word (being in truth his own, for ought I know) we are almoſt as much beholding to him, as for the Obſervation it ſelf: And let thus much ſummarily ſuffice, touching the choice and uſe of theſe adorning Arts. For to ſpeak of garniſhing the Fabrick with a row of erected Statues, about the Cornice of every Contignation or Story, were Diſcourſe more proper for *Athens* or *Rome*, in the time of their true Greatneſs, when (as *Pliny* recordeth of his own Age) there were near as many carved Images as living Men; like a noble Contention, even in point of Fertility, between Art and Nature; which Paſſage doth not only argue an infinite abundance, both of Artizans and Materials, but likewiſe of Magnificent and Majeſtical Deſires in every common Perſon of thoſe Times, more or leſs according to their Fortunes. And true it is indeed, that the Marble Monuments and Memories of well-deſerving Men, wherewith the very Highways were ſtrewed on each ſide, was not a bare and tranſitory entertainment of the Eye, or only a gentle deception of Time to the Traveller; but had alſo a ſecret and ſtrong Influence, even into the advancement of the Mo-

narcy, by continual repreſentation of vertuous Examples; ſo as in that Point, Art became a piece of State.

Now as I have before ſubordinated *Picture* and *Sculpture* to *Architecture*, as their Miſtreſs; ſo there are certain inferior Arts likewiſe ſubordinate to them: As under *Picture*, *Moſaick*; under *Sculpture*, *Plaſtick*; which two, I only nominate, as the fitteſt to garniſh Fabricks.

Moſaick is a kind of Painting in ſmall Pebbles, Cockles and Shells of ſundry Colours; and of late days likewiſe with pieces of Glaſs, figured at pleaſure; an Ornament in truth, of much Beauty, and long Life, but of moſt uſe in Pavements and Floorings.

Plaſtick is not only under *Sculpture*, but indeed very *Sculpture* itſelf: but with this difference, that the Plaſterer doth make his Figures by Addition, and the Carver by Subtraction; whereupon *Michael Angelo* was wont to ſay ſomewhat pleaſantly, that *Sculpture* was nothing but a purgation of Superfluities. For take away from a piece of Wood, or Stone, all that is ſuperfluous, and the Remainder is the intended Figure. Of this *Plaſtick* Art, the chief uſe with us is in the graceful fretting of Roofs: but the *Italians* apply it to the mantelling of Chimneys, with great Figures: A cheap piece of Magnificence, and as durable almoſt within-doors, as harder Forms in the Weather. And here, though it be a little Excurſion, I cannot paſs unremembred again, their manner of diſguiſing the ſhapes of Chimneys in various faſhions, whereof the nobleſt is the Pyramidal; being in truth a piece of polite and civil Diſcretion, to convert even the Conduits of Soot and Smoak into Ornaments; whereof I have hitherto ſpoken as far as may concern the Body of the Building.

Now there are Ornaments alſo without, as Gardens, Fountains, Groves, Conſervatories of rare Beaſts, Birds, and Fiſhes. Of which ignobler kind of Creatures, *We ought not* (ſaith our greateſt * Maſter among the Sons of Nature) *childiſhly to deſpiſe the Contemplation; for in all things that are natural, there is ever ſomething that is admirable.* Of theſe external Delights, a word or two.

Firſt, I muſt note a certain Contrariety between Building and Gardening: For as Fabricks ſhould be regular, ſo Gardens ſhould be irregular, or at leaſt caſt into a very wild Regularity. To exemplify my Conceit, I have ſeen a Garden (for the Manner perchance incomparable) into which the firſt acceſs was a high Walk like a Terrace, from whence might be taken a general View of the whole Plot below; but rather in a delightful Confuſion, than with any plain Diſtinction of the Pieces. From this the Beholder deſcending many Steps, was afterwards conveyed again by ſeveral Mountings and Valings, to various Entertainments of Scent and Sight: which I ſhall not need to deſcribe (for that were poetical;) let me only note this, that every one of theſe Diverſities, was as if he had been magically tranſported into a new Garden.

But though other Countries have more benefit of Sun than we, and thereby more properly tyed to contemplate this Delight, yet have I ſeen

* Ariſt. lib. 1. cap. 5. de part. Anim. Δεῖ μὴ δυσχεραίνειν παιδικῶς ἢ περὶ τὴν ἀπιμωτέρων ζωὴν θεάσασθαι. Ἐν πᾶσι γὰρ τοῖς φυσικοῖς ἐνεστὶ θαυμαστόν.

ſeen in our own, a delicate and diligent Curioſity, ſurely without parallel among foreign Nations; namely, in the Garden of Sir *Henry Fanſhaw*, at his Seat in *Ware-Park*, where I well remember, he did ſo preciſely examine the Tinctures and Seaſons of his Flowers, that in their ſetting, the inwardeſt of thoſe which were to come up at the ſame time, ſhould be always a little darker than the outmoſt, and ſo ſerve them for a kind of gentle Shadow, like a Piece not of Nature, but of Art: Which mention (incident to this Place) I have willingly made of his Name, for the dear friendſhip that was long between us: Though I muſt confeſs, with much wrong to his other Vertues, which deſerve a more ſolid Memorial, than among theſe vacant Obſervations. So much of *Gardens*.

Fountains are figured, or only plain Water'd-works: Of either of which, I will deſcribe a matchleſs Pattern.

The *Firſt*, done by the famous hand of *Michael Angelo da Buonaroti*, in the Figure of a ſturdy Woman, waſhing and winding of Linen Cloaths; in which Act, ſhe wrings out the Water that made the Fountain: which was a graceful and natural conceit in the Artificer, implying this Rule, That all deſigns of this kind ſhould be proper.

The other doth merit ſome larger Expreſſion: There went a long, ſtreight, moſſy Walk of competent breadth, green and ſoft under foot, lifted on both ſides with an *Aquæduct* of white Stone, Breaſt-high, which had a hollow Channel on the Top, where ran a pretty trickling Stream; on the Edge whereof, were couched very thick all along, certain ſmall Pipes of Lead, in little holes, ſo neatly, that they could not be well perceived, till by the turning of a Cock, they did ſpurt over interchangeably from ſide to ſide, above Man's height, in form of Arches, without any interſection or meeting aloft, becauſe the Pipes were not exactly oppoſite; ſo as the Beholder, beſides that which was fluent in the *Aquæducts* on both hands in his view, did walk as it were under a continual Bower or Hemiſphere of Water, without any drop falling on him. An Invention for Refreſhment, ſurely far excelling all the *Alexandrian* Delicacies, and Pneumaticks of *Hero*.

Groves, and artificial Devices under-ground, are of great Expence, and little Dignity; which for my part I could wiſh converted here into thoſe *Crypteria*, whereof mention is made among the curious Proviſions of *Tycho Braghé* the *Daniſh Ptolemy*, as I may well call him: which were deep Concaves in Gardens, where the Stars might be obſerved even at Noon. For (by the way) to think that the brightneſs of the Sun's Body above, doth drown our diſcerning of the leſſer Lights, is a popular Error; the ſole Impediment being that Luſtre, which by Reflection doth ſpread about us, from the Face of the Earth; ſo as the Caves before touched, may well conduce, not to a delicious, but to a learned Pleaſure.

In *Aviaries* of Wire, to keep Birds of all ſorts, the *Italians* (though no waſtful Nation) do in ſome Places beſtow vaſt Expence; including great ſcope of Ground, variety of Buſhes, Trees of good height, running Waters, and ſometimes a Stove annexed, to contemper the Air in Winter. So as thoſe Chantereſſes, unleſs they be ſuch as perhaps delight as

much in their Wing, as in their Voice, may live long among ſo good Proviſions and Room, before they know that they are Priſoners; reducing often to Memory, that Conceit of the *Roman* Stoick, who in compariſon of his own free Contemplations, did think divers great and ſplendent Fortunes of his Time, little more than commodious Captivities.

Concerning *Ponds of Pleaſure* near the Habitation; I will refer my ſelf to a grave Author of our own (though more Illuſtrious by his other * Work) namely *Sarisburienſis de Piſcinâ.*

And here I will end a ſecond Part, touching *Ornaments* both within and without the Fabrick.

Now as almoſt all thoſe which have delivered the Elements of *Logick*, do uſually conclude, with a Chapter touching *Method*; ſo I am here ſeized with a kind of critical Spirit, and deſirous to ſhut up theſe building Elements with ſome methodical Direction how to cenſure Fabricks already raiſed. For indeed without ſome way to contract our Judgment, which among ſo many Particulars would be loſt by Diffuſion; I ſhould think it almoſt harder to be a good Cenſurer, than a good Architect: becauſe the working part may be helped with Deliberation, but the judging muſt flow from an extemporal Habit. Therefore, (not to leave this laſt Piece without ſome Light) I could wiſh him that cometh to examine any noble Work, firſt of all to examine himſelf, whether perchance the ſight of many brave Things before (which remain like impreſſed Forms) have not made him apt to think nothing good, but that which is the beſt; for this humour were too ſowre. Next, before he come to ſettle any imaginable Opinion, let him by all means ſeek to inform himſelf preciſely, of the Age of the Work upon which he muſt paſs his Doom And if he ſhall find the apparent Decays to exceed the Proportion of Time, then let him conclude without farther Inquiſition, as an abſolute Decree, that either the Materials were too ſlight, or the Seat is nought. Now, after theſe Premiſes, if the Houſe be found to bear his Years well, (which is always a Token of ſound Conſtitution) then let him ſuddenly run backwards, (for the Method of Cenſuring, is contrary to the Method of Compoſing) from the Ornaments (which firſt allure the Eye) to the more eſſential Members; till at laſt he be able to form this Concluſion, that the Work is commodious, firm, and delightful; which (as I ſaid in the Beginning) are the three capital Conditions required in good Buildings, by all Authors both Ancient and Modern. And this is, as I may term it, the moſt ſcientifical way of Cenſuring. There are two other, which I muſt not forget. The firſt in *Georgio Vaſſario*, before his laborious Work of the Lives of *Architects*, which is to paſs a running Examination over the whole Edifice, according to the Properties of a well-ſhapen Man. As whether the Walls ſtand upright upon clean Footing and Foundation: Whether the Fabrick be of a beautiful Stature: Whether for the Breadth it appear well burniſhed: Whether the principal Entrance be on the middle Line of the Front or Face, like our Mouths: Whether the Windows, as our Eyes, be

* De Nugis Curial. &c.

ſet in equal number and diſtance on both Sides; whether the Offices like the Veins in our Bodies, be uſefully diſtributed, and ſo forth: For this Allegorical Review may be driven as far as any Wit will, that is at leaſure.

The ſecond Way, is in *Vitruvius* himſelf, *Lib.* 1. *cap.* 2. where he ſummarily determineth ſix Conſiderations, which accompliſh this whole *Art*:

Ordinatio.		*Symmetria.*
Diſpoſitio.		*Decor*, and
Eurythmia.	...	*Diſtributio.*

Whereof (in my conceit) we may ſpare him the firſt two; for as far as I can perceive, either by his Interpreters, or by his own Text (which in that very Place, where perchance he ſhould be cleareſt, is of all other the cloudieſt) he meaneth nothing by *Ordination*, but a well ſettling of the *Model* or *Scale* of the whole *Work*. Nor by *Diſpoſition*, more than a neat and full expreſſion of the firſt Idea or Deſignment thereof; which perchance do more belong to the *Artificer*, than to the *Cenſurer*. The other four are enough to condemn, or abſolve any *Fabrick* whatſoever. Whereof *Eurythmia* is that agreeable Harmony between the breadth, length, and height of all the Rooms of the Fabrick, which ſuddenly, where it is, taketh every Beholder, by the ſecret power of Proportion: Wherein let me note this, That though the leaſt Error or Offence, that can be committed againſt Sight, is exceſs of height; yet that fault is no where of ſmall importance, becauſe it is the greateſt offence againſt the Purſe.

Symmetria, is the Conveniency that runneth between the Parts and the Whole, whereof I have formerly ſpoken.

Decor is the keeping of a due Reſpect between the Inhabitant and the Habitation. Whence *Palladius* did conclude, that the principal Entrance was never to be regulated by any certain Dimenſions, but by the Dignity of the Maſter; yet to exceed rather, in the *More*, than in the *Leſs*, is a mark of Generoſity, and may always be excuſed with ſome noble Emblem, or Inſcription, as that of the *Conte di Bevilacqua*, over his large Gate at *Verona*, where perchance had been committed a little Diſproportion.

Patet Janua: Cor magis.

And here likewiſe I muſt remember our ever memorable Sir *Philip Sidney*, (whoſe Wit was in truth the very Rule of Congruity) who well knowing that *Baſilius* (as he had painted the ſtate of his Mind) did rather want ſome extraordinary forms to entertain his Fancy, than room for Courtiers; was contented to place him in a Star-like Lodge; which otherwiſe in ſevere judgment of Art, had been an incommodious Figure.

Diſtributio, is that uſeful caſting of all Rooms for *Office*, *Entertainment*, or *Pleaſure*, which I have handled before at more length, than any other Piece.

Theſe are the four Heads which every Man ſhould run over, before he paſs any determinate Cenſure on the Works that he ſhall view, wherewith I will cloſe this laſt Part, touching *Ornaments*. Againſt which (methinks) I hear an Objection, even from ſome well-meaning Man; That theſe delightful Crafts, may be divers ways ill applied in a Land. I muſt confeſs indeed, there may be a laſcivious, and there may be likewiſe a ſuperſtitious uſe, both of *Picture* and of *Sculpture*: To which poſſibility of Miſapplication, not only theſe Semi-liberal Arts are ſubject, but even the higheſt Perfections, and Endowments of Nature. As *Beauty* in a light Woman; *Eloquence* in a mutinous Man; *Reſolution* in an Aſſaſſinate; prudent *Obſervation* of Hours and Humours, in a corrupt Courtier; *Sharpneſs* of Wit and Argument, in a ſeducing Scholar, and the like. Nay, finally, let me ask, what Art can be more pernicious, than even *Religion* itſelf, if itſelf be converted into an Inſtrument of Art? Therefore, *Ab abuti ad non uti, negatur conſequentia.*

A PAR-

A PARALLEL OF THE *ANTIENT ARCHITECTURE* WITH THE *MODERN.*

The PREFACE.

READER,

BEFORE I do altogether reſign this *Book* to thy Judgment, I adverti ſe thee, that 'twas not my Deſign in compiling it to teach any Man, much leſs yet to ſatisfy thoſe *Critical* Spirits which the World ſo much abounds with: Nor, is the Publick at all beholding to me; I have no thought of obliging it, an envious, and evil Judge: In a Word, being nothing inclin'd to give them Satisfaction, I have eaſily gratified my Labour with the deſir'd Succeſs: My principal Drift was, Firſt, to ſatisfie myſelf; nor has it coſt me much Trouble; though we ſometimes find certain Humours that are more averſe, and difficult to themſelves, than they would prove to others: For my part, I do not ſo uſe to treat myſelf: We have Enemies enough beſides; and whatever I were able to do, I expect that Men ſhould preſently ſay of me, all that Jealouſy does commonly ſuggeſt in reproach of Novelty: That being no *Artiſan*, it did not become me to preſcribe to others the Rules of their *Myſtery*: That I teach nothing particular and extraordinary here: That the *Books* from whence I have gather'd all that I ſay being common and much ampler than mine, there was no need to have

ſcumm'd them thus ſuperficially over; That it had been better to have ſearch'd, and produc'd ſomething which the World had not yet ſeen: That the Mind is free, not bound, and that we have as good right to invent, and follow our own *Genius*, as the *Antients*, without rendring our ſelves their Slaves; ſince *Art* is an infinite thing, growing every day to more Perfection, and ſuiting it ſelf to the Humour of the ſeveral *Ages* and *Nations*, who judge of it differently, and define what is agreeable, every one according to his own Mode, with a world of ſuch like vain and frivolous Reaſonings, which yet leave a deep Impreſſion on the Minds of certain half-knowing People, whom the Practice of *Arts* has not yet diſabus'd; and on ſimple *Workmen*, whoſe *Trade* dwells all upon their Fingers ends only: But we ſhall not appeal to ſuch *Arbiters* as theſe. There are others to be found (though truly very rarely) that having their firſt Studies well founded on the *Principles* of *Geometry* before they adventur'd to work, do afterward eaſily, and with aſſurance arrive to the knowledge of the Perfection of the *Art*. It is to ſuch only that I addreſs my ſelf, and to whom I willingly communicate the Thoughts which I have had of ſeparating in two Branches the *five Orders of Architecture*, and forming a *body* a part of the *Three* which are deriv'd to us from the *Greeks*; to wit, the *Dorick*, *Ionick*, and the *Corinthian*, which one may with reaſon call the very Flower and Perfection of the *Orders*; ſince they not only contain whatſoever is excellent, but likewiſe all that is neceſſary of *Architecture*; there being but three manners of *Building*, the *Solid*, the *Mean*, and the *Delicate*; all of them accurately expreſs'd in theſe three *Orders here*, that have therefore no need of the other two (*Tuſcan* and *Compoſite*,) which being purely of *Latin* Extraction, and but Foreigners in reſpect to *them*, ſeem as it were of another *ſpecies*; ſo as being mingled, they do never well together, as thoſe to whom I diſcourſe will ſoon perceive, when they ſhall have once put off a certain blind Reſpect and Reverence, which *Antiquity*, and a long Cuſtom (even of the greateſt Abuſes) does commonly imprint in the moſt part of Men, whoſe Judgments they ſo pre-ocupate, that they find it afterwards a difficult matter to undeceive themſelves; becauſe they defer too much, and hardly dare to examine what has been receiv'd by the vulgar Approbation for ſo long a time: Let them but conſider, that we find no *antique example* where the *Greek Orders* are employ'd amongſt the *Latin*, and that ſo many Ages of Ignorance have paſs'd over us, eſpecially in the Arts of *Architecture*, and *Painting*, which the War, and frequent Inundations of *Barbarians* had almoſt extinguiſh'd in the very Country of their *Originals*; and which were in a manner new born again but a few years ſince, when thoſe great Modern *Maſters*, *Michael Angelo*, and *Raphael*, did, as it were, raiſe them from the Sepulchers of their antient Ruins, under which theſe poor *Sciences* lay buried; and I ſhall have fair hopes of their Converſion, and to ſee them of my Opinion. It is the very leaſt of my Thoughts to broach *Novelties*: On the contrary, I would (were it poſſible) aſcend even to the very Source of the *Orders* themſelves, and derive from thence the *Images*, and pure *Ideas* of theſe incomparable *Maſters*, who were indeed their firſt *Inventors*, and be inſtructed from their own Mouths; ſince doubtleſs the farther Men have wander'd from their *Principles*, tranſplanting them as it were into a ſtrange Soil,

Soil, the more they are become degenerate, and ſcarce cognoſcible to their very *Authors.* For to ſay truth, have we at this preſent any reaſon in the World to call thoſe *three* by the name of *Orders*, viz. *Dorick*, *Ionick* and *Corinthian*, which we daily behold ſo disfigured, and ill treated by the *Workmen* of this Age? To ſpeak ſeriouſly, remains there ſo much as a ſimple *Member*, which has not receiv'd ſome ſtrange and monſtrous Alteration? Nay, things are arriv'd to that paſs, that a Man ſhall hardly find an *Architect* who diſdains not to follow the beſt and moſt approved *Examples* of *Antiquity.* Every Man will now forſooth compoſe after his own Fancy, and conceives, that to imitate *Them*, were to become an *Apprentice* again; and that to be *Maſters* indeed, they muſt of neceſſity produce ſomething of New: Poor Men that they are, to believe that in fantaſtically Deſigning ſome one kind of particular *Cornice*, or like *Member*, they are preſently the *Inventors* of a New *Order*, as if in that only conſiſted what is call'd *Invention*; as if the *Pantheon*, that ſame ſtupendious and incomparable Structure which is yet to be ſeen at *Rome*, were not the *Invention* of the *Architect* who built it, becauſe he has vary'd nothing from the *Corinthian Order* of which it is intirely compos'd? 'Tis not in the *Retail* of the *minuter Portions*, that the Talent of an *Architect* appears: *This* is to be judg'd from the general Diſtribution of the *Whole* Work. Theſe low and reptile *Souls*, who never arrive to the univerſal Knowledge of the *Art*, and embrace her in all her Dimenſions, are conſtrain'd to ſtop *there* for want of Abilities, inceſſantly crawling after theſe poor little Things; and as their *Studies* have no other Objects, being already empty and barren of themſelves; their *Ideas* are ſo baſe and miſerable, that they produce nothing ſave *Maſcarons*, wretched *Cartouches*, and the like idle and impertinent *Groteſque*, with which they have even infected all our *Modern Architecture.* As for thoſe others to whom Nature has been more propitious, who are indu'd with a clearer Imagination, they very well perceive that the true and eſſential Beauty of *Architecture* conſiſts not ſimply in the minute Separation of every Member *apart*; but does rather principally reſult from the *Symmetry* and *Oeconomy* of the *Whole*, which is the Union and Concourſe of them all together, producing as it were a viſible Harmony and Conſent, which thoſe Eyes that are clear'd and enlightned by the real Intelligence of *Art*, contemplate and behold with exceſs of Delectation. The miſery is, that theſe noble *Genius's* are in very ſmall Numbers, whereas the vulgar *Workmen*, like to *Ants*, ſwarm prodigiouſly in all places. Would but our *Grandees* once deveſt themſelves of that Prejudice and Diſdain which they conceive of the *Arts*, and of thoſe who apply themſelves unto them, and but conſider the Neceſſity which they above all others particularly have of this of *Architecture*, there would be great hopes we ſhould yet ſee them reflouriſh, and be born again as 'twere from *New* to *Antique.* We have had freſh Experience of this under the *Reign* of *Francis* the Firſt, one of the moſt Illuſtrious *Princes* that Hiſtory has recorded; and who from an Affection extraordinary which he bore to *Virtue* and great *Attempts*, Peopled his *State* with *Perſons* the moſt Rare and Accompliſh'd of the Age wherein he liv'd, who erected thoſe glorious Monuments to the Memory of this incomparable *Monarch.* It is, in my Opinion, the only Expedient to re-eſtabliſh all the *Arts* in that primitive Splendor

from

from whence this unworthy Neglect has precipitated them. The *Greeks* who were the first Inventors of them, and with whom alone they happily arriv'd to their supreamest Perfection, preserv'd them in so high Esteem amongst them, that the *Greatest Personages* of their *Common-wealths* were not asham'd to make open Profession of them, but after a manner nothing *Mercenary*. Their Works were pay'd with Honour; and as they propos'd to themselves the Glory only, and Immortality of their *Name* for recompence; so, nor did they make any thing save what was truly Great and Magnificent. It would appear incredulous, to relate only what we read of this *Nation*, were not the Credit of their *Ancestors* altogether irreproachable, and that there did not remain even to this very Day, the most visible Marks of what is reported. There is not in the whole *Universe* any thing worthy of Renown, which that Divine *Country* did not once produce in its height of Excellency. Those great *Captains*, so many *Philosophers* of all Sects, *Poets*, *Orators*, *Geometricians*, *Painters*, *Sculptors*, *Architects*, and in summ, whatsoever hath stamp'd on it the Character of *Vertue*, proceeded first from thence. Would *we* now do worthily? Let us not then forsake the Paths which these Excellent Guides have trac'd before us; but pursue their Footsteps, and generously avow, that the few gallant things which have yet reached down to us, are due only as deriv'd from them. This is the *Subject* that has invited me to assemble and begin this *Collection* by the *Greek Orders*, which I had first drawn out of *Antiquity* her self, before I so much as examined the Writings of our Modern *Authors*. For even the very best *Books* extant on this *Argument*, are the *Works* of these old *Masters*, which remain to this Day, and whose Beauty is so perfect, and so universally receiv'd, as has for almost two thousand Years been admired by the whole World. It is to them we should repair, to learn to accustom the Eyes, and to conform the Imagination of Young Men to the *Ideas* of those excellent *Spirits*, who being born in the midst of the Light and Serenity of the Fairest *Climate* under Heaven, were so Defecate and Inlightned, that they discern'd those things as 'twere naturally, which we discover with so much Pain, after a long and laborious Indagation. I know 'tis for every one to esteem what pleases him best in the mix'd *Arts*, such as is *this*, whose *Principles* being solely founded upon *Observation*, and the Authority of *Examples*, can challenge no precise *Demonstration*; and therefore I shall make bold to assume the same Priviledge which I leave to others, of judging according to their Fancy: For my part, I find so excellent and particular a Beauty in the three *Greek Orders*, that I am hardly at all concern'd with the other *two* of the *Latin* in comparison; and the Station which has been assign'd them, sufficiently demonstrates that there was no place for them, but after all the rest, as if indeed they had been refus'd by them both: The Rusticity and Meanness of the *Tuscan* having exiled it from the *Cities*, has sent it to the *Country Cottages*; and as unworthy of entering into *Temples* and *Palaces*, 'tis become the very last, as even destitute of Employment: For the *other*, which would pretend to exceed, and refine upon the *Corinthian*, and what they name the *Composite*, 'tis in my Apprehension yet more irrational, and truly methinks altogether unworthy to be call'd an *Order*, as having been the Source of all that Confu-

sion

ſion, which has been brought into *Architecture*, ſince *Workmen* have taken the Liberty to diſpenſe with *thoſe* which the *Antients* had preſcrib'd us, to *Engothiſh* (as one may ſay) after their own capricious Humour, an infinite Number, which do all paſs under this Appellation. Honeſt *Vitruvius* in his Time well foreſaw the ill Conſequence which thoſe of the *Profeſſion* would introduce out of their Love of *Novelty*, which already began it ſeems to incline them to *Libertiniſm*, and the diſdain of the *Rules* of that *Art*, which ought to remain moſt Sacred and Inviolable: ſo that we muſt look on this as on a Grey-headed Evil, which grows worſe and worſe daily, and is become now almoſt incurable. Notwithſtanding, would our Modern *Architects* but yet fix any Limits to the Freedom they have taken, and keep themſelves within the Precincts of the *Roman Order*, which is the ligitimate and true *Compoſite*, and which has likewiſe its *Canons* and *Rules* as well as the reſt, I ſhould find no Cauſe of Complaint, ſince we ſee Inſtances of it among the *Veſtigia*, and Footſteps of the moſt flouriſhing Ages; as in particular, that of *Titus Veſpaſianus*, to whom the *Senate* (after the Sack of *Jeruſalem*) erected a moſt Magnificent *Arch Triumphal*, compoſed of this *Order*: But then it ſhould never be employ'd without mature Advice, and always alone by itſelf; for ſo we find the *Inventors* of this *Order* uſed it, who well knowing its Defects (compar'd with the reſt) did ever forbear to *paragon* them together: But our *Architects* never entring into this Conſideration, have faln into an *Error* which admits of no Excuſe, by forcing the Weaker to ſupport the Stronger. *Scamozzi* is the firſt that has ſpoken of this in his *Treatiſe* of the five *Orders*, where he aſſigns to the *Corinthian* the moſt eminent Place: However, to avoid all conteſt, I find it ſafeſt, never to mix them together at any Time, ſeeing it was never practiſed by the *Antients*; though *Philibert de Lorme*, and *Sebaſtian Serlio*, fancy to have both of them ſeen it in the *Coliſeum*, and produce likewiſe a *Deſign* for an *Example* of their *Compoſed Order*. But believe it, the Obſervation is very erroneous; for they are indeed two *Corinthians*, the one over the other: And albeit in the upmoſt, which forms the *Corona* of this great *Coloſs* of Building, the *Cornice* reſembles not the other, as being very particular; yet are the *Capitals* for all that of the ſame *Order*, as *Scamozzi* has not forgotten to obſerve. This may therefore ſuffice to advertiſe us, not lightly to credit what is deliver'd to us out of *Books*, when we have the Opportunity of repairing to the *Fountain*, and to be ſatisfied of the Truth from thence: For having oftentimes diligently examin'd the *Deſigns* of ſundry *Maſters*, on the ſame Subject, and made an exact Calculation of the *Meaſures* which they eſtabliſh; we ſeldom find them to agree amongſt themſelves, notwithſtanding that all of them profeſs to have accurately obſerv'd them. But that we may wound no Man's Reputation, ſince every one does the beſt he is able, and that we have ever ſome Obligation to thoſe who have ſo freely imparted their Labours to us, I will forbear to exemplify. Let it ſuffice to have given you this *Caution*: Thoſe who ſhall be ſo curious as to try, and which will (I aſſure them) be no fruitleſs Attempt, ſhall ſoon find Difficulty enough in the extraordinary Confuſion of the different Manners of thoſe *Architects*, who inſtead of Working upon the Account of the *Models*

of *Columns* (which is the moſt Natural *Method*, and particularly affected to the *Proportions* of *Architecture*) amuſe us with *Palms*, *Feet*, and other general *Meaſures* (as meer *Maſons* would do) which ſo confounds the Imagination, that 'tis extream difficult to diſentangle one's ſelf out of them; and coſts a world of Time ere one comes at laſt to reduce and apply them to the *Scale* of the *Model*; without which, all their Induſtry becomes fruitleſs, and to no Purpoſe. To this I have principally endeavour'd to apply a timely Remedy, reducing all the *Deſigns* of this *Treatiſe* to one *Common Model*, namely, to the *Semidiameter* of the *Column* divided into thirty *Minutes*, that ſo I may approach the *Preciſe* Meaſures as near as is poſſible. There are haply ſome *Workmen* who upon the ſudden will not approve of it, as being not accuſtom'd to ſo exact an *Examen* of the Particulars which concern their Employment: However, (to prevent their Cenſure) I ſhall refer them to the Writings of *Andrea Pallidio*, and *Scamozzi*, two of the greateſt *Maſters* which we have of the *Profeſſion*; who in their *Treatiſes* of the *five Orders* (taking the entire *Diameter* for *Model*) have aſſign'd it no leſs than *Sixty Minutes*; which yet they frequently ſubdivide into *Halfs*, *Thirds*, and *Fourths*, according as they conceive it neceſſary, and as will appear in this *Collection*, where I have punctually reported their *Deſigns*, parallel'd one with the other by a *Method* ſo perſpicuous, that one may inſtantly perceive both in *what*, and *how much* they differ among themſelves: ſo that by help of this *Compariſon*, every Man has the Liberty of pleaſing his own Fancy, and following whether of the *Authors* I propoſe, as being all of them within the common Approbation. But to the end we may proceed ſolidly, and make a Judicious *Election*, it will firſt be requiſite to be throughly inſtructed in the *Principles* of *Architecture*, and to have apply'd our Studies to *Antiquities*, which are the very *Maxims* and *Rules* of this *Art*: Not as if generally the *Antients* were to be imitated indifferently; on the contrary, there are but very few of *them* good, and an infinite number of them bad, which is *that* has produc'd this confuſed Variety amongſt our *Authors*, who treating of the *Orders*, and their *Meaſures*, have differ'd ſo ſtrangely from one another. It is therefore undoubtedly the ſafeſt Way to have Acceſs to the *Sources* themſelves, and to follow preciſely the *Models* and *Proportions* of ſuch antient *Structures*, as have the Univerſal Conſent and Approbation of thoſe of the *Profeſſion*. Such *Examples* we have at *Rome* in the Theatre of *Marcellus*, the Temple of the *Rotunda*, the three Columns near the *Capitol*, and ſome others of this ſort, whoſe ſeveral *Profiles* I ſhall produce on every of the *Orders*, and after them, thoſe of our more Modern *Architects*; that ſo in confronting them to theſe glorious *Examples*, which are the *Originals* of the *Art*, they may, as to an Impartial *Touchſtone*, have recourſe to *them*, for the Trial and Examination of their *Works*, as I myſelf have done with extraordinary Satisfaction in compiling of this preſent *Treatiſe*, and which every one may do as well as I, and at a far leſs Expence, by all that Time I have ſpent in opening and preparing for them the Way. This is, *Reader*, what I thought fitting to inform *Thee* of concerning my *Labour*, to the End thou mayeſt have a ſincere and judicious Eſtimation of it.

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ADVERTISEMENT
Concerning This
EDITION.

IN Reviſing the *Parallel*, and Preparing it for a New Impreſſion, I once had thoughts of ſubjoining the exact and critical Meaſures of Monſieur *de Gaudete*: Who reckoning from the Diameter of the *Baſe* of the *Column*, divided into Sixty equal Parts (on two *Models*) ſubdivides every Part ſo minutely, and thoſe Parts and Subdiviſions again into yet leſſer Parts, that upon ſo very nice, and ſcrupulous an Examination of not only the ſeveral more *Eſſential Members*; but even of the leſſer *Acceſſaries* of all the *Greek Orders*, yet extant, and of Undeniable Antiquity, (which the moſt Skilful and Famous of our Modern *Architects* have taken their Meaſures from, and propoſed for their Examples) he ſeems to call for, and exact a *New Account* of all that has hitherto been done. This falling chiefly on *Palladio*, *Serlio* and the reſt, I think myſelf concern'd only for Monſieur *de Cambray* (Author of this Excellent Work.) Not that I eſteem thoſe Scruples, and (hardly, if at all, to be diſcern'd) Exceptions (mention'd in their Places) to be very material, (conſidering the Modeſt Liberty which has frequently been taken by even the Antients themſelves upon Occaſion; but to take off the Prejudice, which ſome haply may conceive, who might otherwiſe think them of more Importance than perhaps they really are; eſpecially, ſince (beſide many other) we have the Suffrage of that able and knowing *Architect*, the late Monſieur *Bloudel*; who in his *Recenſion* of the moſt Famous *Architects*, *Antient* and *Modern*, has this Paſſage, ſpeaking of the *Parallel*, " That moſt Incomparable and Judicious Work (ſays he) of Monſieur *de* " *Chambray* I can never ſufficiently commend, fill'd and enrich'd as it is " with a Thouſand Learned and Judicious Remarks: Having compar'd the " ſeveral Manners of the chief and principal of our Modern *Architects* one " with the other, and aſſign'd them their reſpective *Claſſes*: That which " is of infinite Advantage, is alſo his having reduc'd all their heretofore

" ſeveral

" ſeveral and different Meaſures, (which, till now, render'd them ſo exceed-
" ingly troubleſome and perplexing) to *one* and the *ſame ſingle Diviſion* of *Mo-*
" *dules* into *thirty Parts*; which being of ſuch Univerſal Advantage, I know of
" nothing more eaſy, uſeful and highly beneficial than that excellent and
" noble Work of his.

'Tis true indeed, Monſieur *Colbert*, having in the Year 1674, procur'd the Eſtabliſhment of an *Academy* for *Architecture* in *Paris*, and ſparing no coſt to encourage, advance, and carry it on to the higheſt Pinacle (after all that *Palladio* and the reſt had perform'd of more Uſe and Accuracy than had ever yet been done; and by their Inſtructions, Travels, and Experience, publiſh'd and approv'd of with ſuch Applauſe) to ſend *Des Godetz* a Student in the *Academy* (with other Artiſts) to *Rome*, to perfect and improve themſelves in *Architecture*, *Painting* and *Sculpture*, ſubſervient to it; where he made a more exact and nice *Reſearch* among the *Antiquities* of that City, remeaſuring and recalling to a new *Calculation* what had been before ſo often done; and bringing back his new Deſigns, with the Admeaſurements, and a Preciſion ſo delicate (and even to a *Hair-breadth*, as they ſay) ſo ſcrupulouſly nice, as reaches not only to ſingle *Feet*, *Inches* and *Lines* alone, but even to the minuteſt *Part* of a *Part* of a *Line*, curiouſly engraven at the *French* King's Charge, and pompouſlyſet forth under the *Title* of the *Ancient Buildings of* Rome, with Diſcourſes upon them.

But now, whether after all this critical and elaborate Scrutiny, they amount to any conſiderable Advantage in the main, is left to the Judicious, and thoſe who ſhall think it worth the while to examine and *collate* them with the *Plates* and *Figures*, where one ſhall meet ſeveral other Deſigns and Deſcriptions of ancient Buildings (beſides what are extant at *Rome*) perform'd (as to the Graving Part) with extraordinary Accuracy by the *Burines* of *Marot*, *Le Cler*, *Boiſſiere*, *Chaſtillon*, *Pautus*, *Guerard*, *Bonart*, *Tournier*, &c. all of them incomparable Artiſts, and of *Paris* alone, where they abound with excellent *Gravers*; whilſt our whole Nation hardly affords us *One* comparable to any I have nam'd, or indeed, that's almoſt tolerable.

This I mention to ſtir up an *Emulation*, and if poſſible, to encourage our Country-Men (whoſe *Genius* may lead them to ſo laudable a Quality and Addreſs) by applying themſelves more ſeriouſly to it: And that we may not for ever be out-done by the *French* and *Dutch*, to the reproach of thoſe ſhameleſs Bunglers of our's, who daily diſgrace ſo noble and ingenious an Art, with their wretched *Sculps* of *Frontiſpieces*, lame *Figures*, *Landskips* and *Proſpects*, without *Deſign*, *Simmetry*, or any regard to *Perſpective*.

One thing more I cannot but applaud before I have done with Monſieur *Des Godetz*, which is this; That whereas other *Architects* have generally repreſented thoſe venerable and famous *Ruines* of the Antients as entire as when firſt Erected, or rather, ſuch as they fancied them before their Demolition (when all this while there perhaps remains not ſtanding above two or three *Columns*, broken *Capitols*, *Buſts*, *Bates*, *Cornices*, and other miſerable Fragments of collapſed *Temples*, *Theatres*, *Aqueducts*, *Amphitheatres*, *Triumphal Arches*, &c. and other heretofore glorious Structures) Monſieur *Des Godetz* has deſign'd and given us them as they are at preſent, or with very little Reſtoration, unleſs

where ſome principal Member was Defective in the *Foliage* or *Voluta* of a *Capitel*, &c. whilſt what remain'd ſound and entire, left no Occaſion of doubting, that what he ſupply'd was really the ſame when Perfect.

That yet our *Parallel* may not ſuffer thro' any material Overſight; where *Des Godetz* more finiſh'd *Reſearches* may in any ſort contribute to its Perfection, I have not ſpared the giving Notice of them; that when our Workmen ſhall well conſider of how ſmall Importance the Particulars conſiſt, (and how eaſily reform'd where neceſſary) they may proceed, and with the more Courage and Aſſurance rely upon our *Parallel*.

This Admonition (together with what of my own may attend it) I leave, out of the great *Affection* as well as the *Relation* I have to the Proſperity of that *Auguſt* and truly *Glorious Foundation*, which is now Erecting at *Greenwich*, to be a ſtanding Seminary for the Supply, Entertainment, Relief, and Encouragement of *Emerited* and *Deſerving Seamen*, next under *God alone*, the *Guardians* and *Protection* of theſe Dominions.

NON NOBIS SOLUM NATI SUMUS: SED PARTIM PATRIÆ.

EXCEPTIONS.

M. *Des Gaudetz*.			M. *De Chambray*.		
Page		Plate	Page		Plate
28	29	VIII	66		67 *Portico* of the *Pantheon*.
31	32	IX	As before		
55	56	XX	84	85	*Altar* of the *Pantheon*.
101	102	IX	38		39 *Fortuna Virilis*.
148	149 & 150	I II	68		69 *Torre di Nerone*.
182	183	IV	124	125	125 *Arch* of *Titus*.
184	185	V			
294	295	III	16		17 *Altar* of *Marcellus*.
296	297	IV	As before		
298	299	V	40		41 The ſame.

OBSERVATIONS.

As to the *Meaſures*; Would one in earneſt think it much worth the pains, or to any great prejudice of Monſieur *de Chambray*, that ſome few Members and *Membretti*, were by a 20th part, and 25th part of a part too High or too Low? A 19th part and 24th part of a part too Narrow or Broad? Or eleven 36th parts of a part too Long or too Short? A *Projecture* too far *Salian* by $1\frac{1}{2}$ The *Guttæ* under a *Triglyph* too broad by $\frac{17}{18}$ parts of a part? That an *Aſtragal* beneath the Eggs, was too low by $1\frac{7}{12}$ parts of a part? Or that among the *Ornaments* and *Acceſſories*, a plain *Water Leaf* was put

inſtead of an indented one? That in a *Chaplet*, the *Beads* did not fall exactly under the *Eggs*, with *Darts* between the *Foliage*, where other Leaves ſhould have been carv'd? *Acanthus* in a *Capitel*, inſtead of *Olive* or *Parſley*, and a ſmall ſlender *Caulicle*, between the larger *Foliage* of a *Compoſite Capitel*? Making the Hollow of the *Voluta* plain, and without Ornament; and embelliſhing the *Edges* of another with a *Fret*? Sticking a *Roſe* in the middle of the *Plinth*? A *Cyma Recta* in place of an *Ovolo*? Extending the *Liſt* with a return above the *Architrave*, and over the *Triglyphs*, which ſhould be even and ſtreight; and the upper part of the half *Channel Chamfer'd*, &c.?

Such in truth, and the like, are frequently the *Minutiæ* and *Animadverſions* ſo nicely inſiſted on (tho' I do not ſay there are none more material) but whether worth his travelling ſo far, and ſuffering ſo much to bring Home, after his being redeem'd from the *barbarous Pyrates* and *Corſairs* (into whoſe Hands he fell at his return) I leave to others. What his *Obſervations* and *Exceptions* are on thoſe of *Palladio*, *Serlio* and their Companions in the *Parallel*, I am not much ſollicitous about; ſince the *Curious* may *conſult* and *confront* the *Deſigns* and *Plates* themſelves. Thoſe in the mean time, which concern Monſieur *De Chambray* (not exceeding a Dozen) would have been leſs chargeable to have been added by the *Bookſeller* than by the *Buyer*: But he deſpairing to meet with any tolerable *Graver* among us, (capable of Approaching thoſe whom Monſieur *Des Gaudetz* employ'd) I could not impoſe it on him: Nor was it thought of ſo great Importance, conſidering (as already noted) the modeſt Liberty, which 'tis known has now and then been taken, even by the *Antients* themſelves. Let therefore our *Students* in *Architecture*, and *induſtrious Workmen* proceed with good *Aſſurance*, that following the *Author* of our *Parallel*, they Copy after an excellent and approv'd *Maſter*.

PART

PART I.

CHAP. I.

Of the ORDERS *in General.*

IT is ſufficiently difficult to determine preciſely, what the Name of *Order* may ſignify amongſt our *Architects*, though it be indeed very neceſſary to underſtand it well. Of all the *Moderns* who have written upon the Five *Orders*, there is none, ſave *Scamozzi*, who has once remember'd to give us the Definition; and it is in the 1ſt *Chap.* of his *ſecond Part*, *Line* 42. where he ſaith, That it is a kind of Excellency, which infinitely adds to the Shape and Beauty of Buildings, *Sacred* or *Prophane*. But in my Opinion, he had even as good have held his Peace, as the reſt have done, as to have ſpoken in ſuch wandring Terms, and with ſo little Solidity. The Father *Vitruvius* in *C.* 2. *L.* 1. calls it *Ordonance*, and the Term is at preſent in huge Vogue amongſt our *Painters:* When they would expreſs the Elegant Compoſition of a *Piece*, or the Diſtribution of *Figures* in an *Hiſtory*, they ſay, that the *Ordonance* is good: Notwithſtanding, this is not yet exactly the Intention of *Architects*; and *Vitruvius* (in pain to expreſs it to us) adds, That it is *an apt, and regular Diſpoſition of the Members of a Work ſeparately; and a compariſon of the Univerſal Proportion with Symmetry.* Perault *tranſlates it, An apt and regular Diſpoſition of the Members of a Work ſeparately, with reſpect to the Proportion or Symmetry of the Whole.* Another, peradventure more ſubtile and penetrant than I am, might find out the Myſtery of theſe Words, which I confeſs I comprehend not; and therefore it is, that I have tranſlated them purely from the *Latin* Text Word for Word, that I may the more naturally propoſe them to thoſe who ſhall deſire to Profit by them. *Daniel Barbaro* (who hath given us two Excellent *Commentaries* upon this *Author*) has been very induſtrious to clear this Paſſage, which yet is not without ſome Difficulty. *Philander*, on the ſame Chapter, found out a ſhorter way, to ſay nothing at all, and amuſes himſelf upon other Matters far more unneceſſary: So that to get out of this *Labyrinth*, we muſt even take it in Pieces, and conſider the things apart; that ſo it may, as it were, touch our Imagination, and diſtinctly form its *Ideas* in us, which is the Buſineſs we are to enquire after: For the *Art* of *Architecture* does not conſiſt in *Words*; the *Demonſtration* ought to be ſenſible and ocular. It is very perſpicuous to all

thoſe

thoſe of this *Myſtery*, that the Principal Piece of an *Order* is the *Column*, and that its *Entablature* being once placed on the *Capitel*, produces the entire *Compoſition*. If therefore we will define it exactly, and give the moſt expreſs Meaning of it, we muſt, as it were, make a very *Anatomy* of the Parts, and ſay, that the *Column*, with its *Baſe*, and *Chapiter*, crown'd with an *Architrave*, *Frize* and *Cornice*, forms that kind of *Building* which Men call an *Order*; ſeeing all theſe individual Parts do generally encounter, and are found through all the *Orders*; the Difference amongſt them conſiſting in no other particular, than in the Proportion of thoſe *Parts*, and the Figure of their *Capitels*. They have yet indeed ſome peculiar Ornaments, as *Triglyphs*, the *Dorick*; *Dentelli*, or Teeth, the *Ionick*; and the *Corinthian* her *Modilions*: but they are none of them of ſo general and indiſpenſable Obligation, but that even the moſt regular of the *Antients* themſelves, have, upon ſome Conſiderations, frequently diſpenſed with them. For *Ornaments* are but Acceſſories in the *Orders*, and may be diverſly introduced as occaſion requires; principally in that of the *Corinthian*, where *Artiſts* being to repreſent an Effeminate and Virginal Beauty (as we may eaſily deduce from what *Vitruvius* has recounted to us of *Callimachus*. 1. *Chap.* 4. *Book*) ought to omit nothing which may contribute to the Perfection and Embelliſhment of the Work: and the Antients have preſcrib'd us ſo many Examples of this *Order*, in which they have ſo profuſe and luxurious in Ornaments, that one would ſwear, they had drawn their Imagination quite dry to crown this Maſter-piece of *Architecture*. But it is not with the other *Orders* after this ſort, were there is a more Maſculine Beauty requir'd; eſpecially in the *Dorick*, the Solidity whereof is totally repugnant to the Delicateneſs of theſe Ornaments; ſince it ſucceeds ſo much better in the plain and ſimple Regularity of its Proportions. *Garlands* and *Poſies* ſuit not with *Hercules*; he is beſt adorn'd with a rough-hewn and maſſy Club: For there are Beauties of ſeveral Kinds, and thoſe oftentimes ſo unlike, as what is agreeable to the *one*, is quite contrary to the *other*. As for the *Ionick Order*, 'tis, as it were, in the middle of the two Extreams, holding in a manner the ballance 'twixt the *Dorick* Solidity and Genteelneſs of the *Corinthian*; for which Reaſon me find it diverſly employ'd in antient Buildings, ſimple and plain, according to the Genius of the *Architect*, or Quality of the *Structure*. So as theſe *three Orders* may very well furniſh all the *Manners* of Building, without being at all oblig'd to have recourſe to the *Tuſcan Order*, or that which is *Compoſed*; both which I have therefore expreſly reſerv'd for the Concluſion of this *Treatiſe*, and ſeparated from the reſt, as in truth but Supernumeraries and almoſt Inutile. For the Excellency and Perfection of an *Art*, conſiſts not in the multiplicity of her *Principles*; but contrarily, the more ſimple they are and few in Number, the more worthy they are of our Admiration. This we ſee manifeſted in thoſe of *Geometry*, which is in truth the very Foundation and univerſal Magazine of all thoſe *Arts* from whence *this* has been extracted, and without whoſe Aid it were impoſſible it ſhould ſubſiſt. Well therefore may we conclude, That the *Orders* being no other than the very *Elements* of *Architecture*, and theſe *three firſt*, which we have deduc'd from the *Greeks*, comprehending all the *Species* of Building; it were but a ſuperfluous thing we ſhould pretend to augment their Number.

CHAP.

CHAP. II.

Of the DORICK Order.

IT is no ſmall Advantage for the *Dorick Order*, to demonſtrate that it has been the very firſt regular *Idea* of *Architecture*; and that, as the Firſt-born and Heir of this *Queen* of *Arts*, it has had the Honour alſo to have been the firſt Builder both of *Temples* and *Palaces*.

The Antiquity of its Original (according to all thoſe who have written thereof) is, in a manner, immemorial; notwithſtanding *Vitruvius* refers it (and that with ſufficient appearance) to a Prince of *Achaia*, named *Dorus*; who being Sovereign of *Peloponneſus*, built in the famous City of *Argos*, a magnificent *Temple* to the Goddeſs *Juno*, which was the very firſt *Model* of this *Order*: In imitation whereof, the neighbouring People erected divers others; amongſt which, the moſt renown'd was that which the Inhabitants of the City *Olympia* dedicated to *Jupiter*, whom they ſurnam'd *Olympicus*. The Iſland of *Delos*, built another very famous one to the God *Apollo*, in Memory of his Birth in that Place, and of whom there are to this Day ſome *Veſtiga* remaining. And in this it was that the firſt *Tryglyphs* were made in the Form which we now behold them, repreſenting the Figure of an antick *Lyre*, of which Inſtrument this *God* had been the Inventor. In *Elis*, a City of the ſame Country, there were divers memorable Fabricks, conſiſting all of this *Order*, whereof the principal were a large *Periſtyle*, or Porch, ſerving for a publick Place, having about it a triple Range of *Portico*'s built on Columns, and three magnificent *Temples*, as *Pauſanias* in his fifth Book makes mention; the one Conſecrated to the Goddeſs *Juno*, environ'd with huge marble Pillars; the other to *Dyndima*, the Mother of the Gods; and a third to *Minerva*, which bore the Name of their City: And this laſt was without doubt a moſt incomparable Maſter-piece, having been built by the famous *Scopas*, Competitor with *Praxiteles* in the Structure of that ſtupendious *Mauſoleum*, which the Queen *Artemiſia* erected in Memory of her Husband. In his *Preface* to the ſeventh Book, *Vitruvius* makes mention of others, amongſt which he celebrates thoſe of *Ceres* and *Proſerpine* in the City of *Eleuſis*, as a Work of prodigious Grandeur. But it would be but unprofitable for us to make any further Diſquiſition concerning theſe Edifices, ſince thoſe who have treated of them, have left us no particular Remarks touching their Form, from whence we might derive any thing of Advantage for our imitation. They talk much alſo of the Names of many great *Architects* of this Age, who themſelves writ the *Rules* of their Profeſſion, amongſt whom, one nam'd *Silenus*, had generally treated of the *Dorick* Proportion; and a certain *Theodorus* made the Deſcription of a *Temple* of the ſame *Order*, erected to the Goddeſs

Juno by the Inhabitants of the Isle of *Samos*, with sundry others mention'd in the same Place, whose Books and Works are not now to be found; so that after the loss of so many incomparable *Authors*, who were the very Source and Fountain of the *Art* whence we might at present extract the Purity of its *Original*, we must of Necessity content our selves with the Observations and Conjectures which the *Moderns* have made upon certain Tracks and Footsteps of *Antiquity*, which in this Conjuncture serve us instead of *Books*, and wherein all those *Masters*, which I have here assembled, as to an *Oecumenical* and General *Council* of *Architecture*, have finish'd and perform'd their Studies.

But for as much as naturally every Man abounds in his own Sense, and dresses up a Beauty after his particular Mode, I conceiv'd it expedient from the Designs which they have left us for *Rules*, to have continual Recourse to the *Antients*, as to the best and most invariable *Compass* which we can possible steer by; amongst whom we shall find sufficient Variety, reasonably to satisfie the *Gust* of such as are desirous of Choice. And for this purpose, I shall upon every *Order* exhibit too or three *Examples* drawn from the *Originals* themselves, and very accurately measur'd by the Account of the *Module* of the *Column*, with the very *Division* which I have observ'd in the *Designs* of other *Masters*; that so all concurring in one Uniformity, and under the same *Scale*, the Comparison and Examen may become the more easie and intelligible : For the mutiplying of *Operations* is ever disadvantagious, by reason of the Confusion which it ordinarily produces in the Minds of those who Work, and that it also wastes more Time; both which Inconveniencies are of very great importance. And when all the Fruit of my Travail in this Assembly of *Authors* should be of no further Profit to the Studious in this *Art*, than to have thus adjusted them together, I conceive they ought to be very well satisfied.

But let us return to the *Dorick Order*, and consider its *Form*, *Proprieties*, and *Difference* from the others in Gross, before we enter into the Parcels of its Proportions, since general Rules are ever to precede particular. Having then proposed for a Foundation, that this *Order* represents *Solidity* to us, as its *Specifick* and principal Quality, we ought not to employ it but in great massy Buildings and Edifices of the like Nature; as for *Ports* of *Citadels*, and *Fortresses* of *Towns*, the Outside of *Churches* or *publick Places*, and the like, where the Delicateness of the Ornament is neither convenient nor profitable; for as much as the heroic and gigantine Manner of this *Order* does excellently well in those places, discovering a certain *masculine* and natural Beauty, which is properly that the *French* call *La grand Maniere*.

Upon this Subject I am observing a thing which in my Opinion is very curious touching the beginning of the difference of *Manieres*; whence it proceeds, that in the same Quantity of *Superficies*, the one seems great and magnificent, and the other appears poor and but trifling. The Reason of which is very pretty and not ordinary. I say then, that to introduce into *Architecture* this *Grandeur* of *Maniere* of which we speak, we ought so to proceed, that the Division of the principal Members of the *Orders* consist

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but of few parts; that they be all *Great* and of a bold and ample *Relievo* and Swelling; that the *Eye* beholding nothing which is little and mean, the *Imagination* may be more vigorously touch'd and concern'd with it. For example: In a *Cornice*, if the *Gola* or *Cymatium* of the *Corona*, the *Coping*, the *Modilions*, or *Denteli*, make a noble shew by their graceful Projectures, and that we see none of that ordinary Confusion which is the result of those little Cavities, Quarter-rounds of the *Astragal*, and I know not how many other intermingled Particulars, which produce no Effect in great and massy Works, and which very unprofitably take up place to the prejudice of the principal Members; it is most certain, that *this* Manner will appear solemn and great; and *that*, on the contrary, become pitiful and mean, by reason of the multitude of these smaller Ornaments, which divide and scatter the Angles of the Sight into so many Beams, and so press'd together, that the *Whole* appears but a Confusion. And though one would judge upon the sudden, that the multiplicity of Parts should contribute something to the appearance of the Grandeur and State; yet notwithstanding it happens quite otherwise, as we may easily perceive in examining it by *Examples*, and in the *Designs* of the *Masters* which I have here collected together; where in the same instant a Man may discern both the Quality of their *Genius*'s, and the Variety of their Judgments: For some of them esteem *that* to be delicate and rich, which others term mean and confus'd; and *that* which seems to us of the *Grand Maniere*, in their Eyes appears to be but gross and heavy; and indeed it would so prove if one should exceed the Terms of Proportion, and did incline too much to either Extreme: But be this only spoken *en passant*. We proceed now to our *Orders* in general.

The *Columns* of the *Dorick Order*, have this remarkable amongst the rest; that in the faireſt Works of *Antiquity*, in which they have been employ'd, we find them without *Bases*; as in the *Theatre* of *Marcellus* at *Rome*, in that at *Vicenza*, and in a very magnificent *Triumphal Arch* at *Verona*; and *Vitruvius* having treated of this very *Order*, more exactly than of any other, speaks not so much as a Word of its *Basis*, albeit he hath sufficiently describ'd the Measures of the *Ionick*, and of the *Attick* for the *Corinthian*, without having so much as omitted that of the *Tuscan*; though there is not one of our Modern *Architects* but make some Cavil at it, forming *one* to themselves after their own Invention.

For my part, I should make a great Scruple to condemn these old *Masters*, who did all with so much circumspection. One had much better endeavour to discover their Intention, who did certainly proceed with great Judgment, than to add any thing preposterously to this *Order*, and which may prove repugnant to its Principles.

Let us take therefore the thing from its Original, and consider upon what Account they added *Bases* to the Feet of *Columns*, and what *there* they represent, that thence we may infer whether they are likewise as proper to these we speak of here, as they be to the other.

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Vitruvius tells it us in the firſt Chapter of his fourth Book, and had not it ſeems ſo much as once ſpoken of it, but upon occaſion of the *Ionick*, which he affirms to have been compos'd after the *Module* of a feminine Beauty, to which he ſuits all the reſt of the Parts; as the *Voluta*'s of the *Capitol*, to the Mode of the *Head-tire* and *Treſſes* of Womens-Hair: The *Vivo*, or Shaft of the *Column*, to their airy and decliate Shape: The *Flutings* and Channelling, to the Plaits of their Robes: And the *Baſe*, to the *buskin'd* Ornament of their Legs and Feet.

In the ſame place he compares our *Dorick* to a robuſt and ſtrong Man, ſuch as an *Hercules* might be, whom we never repreſent but on his bare Feet: So as from hence we may reaſonably judge, that to the *Doruck Order* alſo *Baſes* are no ways proper.

But the Cuſtom which has licentiouſly been introduc'd among ſo many Examples as we find among the *Antiques*, has ſo ſtrangely debauch'd and poſſeſt the Imagination, by I know not what falſe appearance of Beauty, that it now tranſports it quite beſides Reaſon. Nevertheleſs, ſuch as are clear-ſighted, being advertis'd of this abuſe, will ſoon rectifie, and undeceive themſelves: And, as what ſeems moſt *likely*, is then detected to be erroneous when 'tis diligently examin'd; ſo alſo the appearances of Beauty, when they are againſt Reaſon, become in fine but the more extravagant.

This Obſervation being eſtabliſh'd upon thoſe great Examples which I have cited, and Reaſon ſerving for its guide, let it paſs for *Demonſtration*.

But we will now conſider the reſt of the Order.

His *Entablature* is more maſſy and tall than any of the following Orders; becauſe the ſtrength of the *Column* being greater, prepares him alſo for the greater Burthen. It has ordinarily one fourth part of the *Column*; whereas in the other, he has very often but a fifth, and ſometimes leſs. The *Cornice* would not be deck'd with any *Foliage*, or like Trimming; but in caſe you allow him *Modilions*, they ſhould be ſquare and very plain. The *Freeze* has a regular Ornament, which are the *Triglyphs*, the *Compartiment* whereof obliges one to a very great inconvenience, and which was heretofore ſo cumberſome, that even the skilfuleſt *Maſters* had much ado to diſengage themſelves. But *Vitruvius* has found a very ſufficient Expedient, as may be ſeen in his fourth Book, *cap.* 3. In the interim let it ſuffice to affirm here, that all the inconveniency conſiſts in ſo contriving the Matter, that the *Triglyph* be preciſely plac'd over the middle of the *Column* which it encounters; and that the *Metops* (that is to ſay) the Spaces 'twixt the *Tryglyphs*, be perfectly ſquare; for that is ſo eſſential in this *Order*, that one ſhould never diſpenſe with it. That which renders the Execution difficult, proceeds from the Diſtribution of the *Intercolumniations*, which have alſo their Diſtances regular and determin'd, which does not juſtly quadrate and ſuit with thoſe of the *Triglyphs*. See *cap.* 2. of the *Third Book* of *Vitruvius*, Commented by the Reverend *Daniel Barbaro*, where all this is rarely well explain'd, both by Diſcourſe and Figure.

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The *Architrave* hath alſo its Ornament particular, which conſiſts in certain pendent *Drops* under the *Tryglyphs*, that ſeem after a ſort to be faſtened to it, as if they were all of a piece; for that one never ſees the one without the other.

The entire Body of the *Architrave* ought to appear Solid and very Subſtantial; for which effect I would not have it exceed one full *Face*, leaſt parting it in two, it appear feeble and weak, according to the Principle which we have newly eſtabliſh'd upon the Diverſity of *Manners*: Nevertheleſs this is but of ſmall Conſequence *here*, provided one be careful not to break it in three *Faces*, as in the other *Orders* they do; in which Caſe, the fault would be remarkable.

Behold then in groſs as 'twere a rough Draught of the *Dorick Order*, upon which one may with eaſe find out all the ſeveral Parts of its Members in particular, with their reſpective Meaſures, which is by this Expedient found always within the regular Terms of its Extent.

I ſhall touch ſome of the Principal only, that I may facilitate the Way, referring you for the reſt, to the *Deſigns*, where every thing is ſo clear and punctual, that having once conceiv'd the *Module* (which I make uſe of throughout) to be the *Semidiameter* of the *Column*, divided into thirty *Minutes*; and, that I continually begin to meaſure the *Projectures* of every *Profile* from the *Central* Line of the *Column*, to have (in the mean time) with the Proportion of the Members, the right Poſition and juſt Level of the *Pillar*, all the reſt admits not of the leaſt imaginable Difficulty: For preſently you'll find, that thirty *Minutes* making the *Semidiameter*, ſixty muſt compoſe the whole *Diameter*, and forty five, *three Quarters*; forty, *two Thirds*; twenty, *one third*; fifteen, *a quarter*, and ſo of the reſt, as I have expreſsly obſerv'd it, that I may by the ſame means make you comprehend, how I have reduc'd all the Meaſures of my *Deſigns* by *Minutes*, without making uſe of the Terms of *Module*, *Diameter*, *Thirds*, *Quarters*, or the like Proportions, to avoid Perplexity, and cumbring the *Deſigns* with ſo much writing; and indeed, for that they are not preciſe enough, and would have often oblig'd me to ſuperadd the *Minutes*, and to repeat one *Module* and three *Minutes*, two thirds of a *Module* and four *Minutes*, a quarter of a *Minute*, half a *Module* and two *Minutes*, with a number of ſuch like Fractions, which would have created much unprofitable Labour, and bred infinite Confuſion.

This eſtabliſh'd, let us proceed to the Application, and take our *Dorick Order* again in pieces. But leſt the Variety which we frequently encounter amongſt the Deſigns of the Modern Authors that I have here collected, ſhould hinder us from reſolving upon ſomething fix'd and determin'd, I will only purſue that *Antient* Example taken out of the *Theatre* of *Marcellus*, as being the moſt regular of all the reſt, by the univerſal Suffrage of thoſe of the Profeſſion; and ſo conformable to what *Vitruvius* has written concerning the general Proportions of this *Order*, that ſome are of Opinion he was himſelf the *Architect* of this magnificent Work. But I muſt confeſs, I am not of their Faith, becauſe of the *Dentelli* which are cut in the *Cornice*; for *Vitruvius* in the *ſecond Chapter of his firſt Book*, plainly interdicts them

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the *Dorick Order*, as being naturally affected to the *Ionick* : But this *Queſtion* concerns not our preſent Diſcourſe. I find then, that the whole *Shaft* of the *Column* has in length *ſeven times* its *Diameter*; which on the foot of the Diviſion of the half *Diameter* in *thirty Minutes* (for in all this Treatiſe I ever take the *Semidiameter* of the *Column* for the *Module* of the *Orders*) make *four hundred* and *twenty Minutes*, which amounts to *fourteen Modules*. The height of the *Chapter* contains *thirty Minutes*, which make *one Module*; as does likewiſe the *Architrave*: The *Freeze* with its *Fillet* (which is that flat and thin *Band* or *Liſt*, which ſeparates it from the *Cornice*) has *one Module* and a *Quarter*, which are *thirty ſeven Minutes* and a *half*; ſo that all theſe *Modules* computed together, and the number of their *Minutes* reduc'd to a *Total Sum*, the Altitude of the entire *Order* amounts to *eighteen Modules* and *three Quarters*, which make up *five hundred ſixty two Minutes* and an *half*; and the *Entablature* (which is the *Architrave*, *Freeze* and *Cornice*) being to contain one quarter part of the *Column* (which is its regular Proportion) comprehends juſt an *hundred twelve Minutes* and an *half*, which are *three Modules* and *three Quarters*; and which I expreſly repeat, that I may yet add, that though all the *Examples* of this *Order* (which may be as well found amongſt the *Antients* as the *Moderns*) have not always the *Entablature* comprehended within the ſame Terms of *Modules* that *this* has *here*, they may yet notwithſtanding be according to Rule in the general Proportion; provided that the *Entablature* contain a quarter of the *Column*; which is neither limited to *fourteen Modules*, nor yet to *fifteen*, but may ſometimes advance even to *ſixteen*, and more, as occaſion preſents itſelf: So that a *Column* of *ſixteen Modules* ſhall have a higher *Entablature* than one of *fourteen*. But then it is neceſſary, that all this difference of one *Entablature* to the other, happen only in the *Cornice*, in regard that the *Freeze* and the *Architrave* have always their preciſe and determinate *Meaſures*: The one has a *Module*, the other a *Module* and an *half*, without any reſpect to the different height of the *Columns*. Now the *Cornice* being to ſupply what is deficient to arrive to the fourth part of the *Column*, 'tis evident that its particular Proportion muſt depend on that of the *Column*; and that the *Cornice* of one *Profile* can never ſerve for another, though it be of the ſame *Order*, unleſs the height of the *Columns* be likewiſe equal in them both, which thing ought very diligently to be conſider'd: That from this Obſervation a Man may arrive to a good and judicious Examen of all thoſe *Profiles* which the *Moderns* have given us of this *Order*; and underſtand ſuch as are worthy the being follow'd: For the general Proportion being once defectuous, 'tis in vain to ſearch for it in the *Retail*, or *minuter* Parts; becauſe *that* is neceſſarily Relative, and that the one cannot poſſibly ſubſiſt without the other.

But to the end we may render what we have diſcuſs'd eaſy to the Reader, who haply, for want of Practice, may find himſelf at a loſs, I am going to deliver him a *Method* extraordinary ſhort and expedite, by means whereof he may inſtantly make it without the leaſt diſorder or confuſion.

He muſt take the whole height of the *Entablature* of the *Deſign* which he would examine, and thereof make a *Multiplication* conformable to the Proportion which it ought to bear with its *Column*, having ſtill a regard to the

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Order which it repreſents. Put caſe, *for Example*, one *Quarter*, as in this of the *Dorick*; he muſt multiply the *Entablature* by four; if it be a *fifth* (as we ſhall ſee in ſome of the following Examples of the *Corinthian*) he muſt multiply it by *five*, and ſo of the reſt: For the Total of this Multiplication ought to give us preciſely the height of the *Column*; and where ever this does not quadrate, certain it is, the *Profile* is irregular.

I ſhould be too Prolix if I pretended to decypher thus by ſmaller Scruples and Minutes all that belongs to theſe *Principles*; and while I think to render myſelf intelligible by a tedious Diſcourſe and Calculations, become in fine both confus'd and troubleſome to my *Reader*, who doubtleſs will ſooner comprehend it all by ſeeing my Deſigns, ſince *Words* are never ſo expreſs as *Figures*.

The Module or Generall Scale for all the following Profiles.

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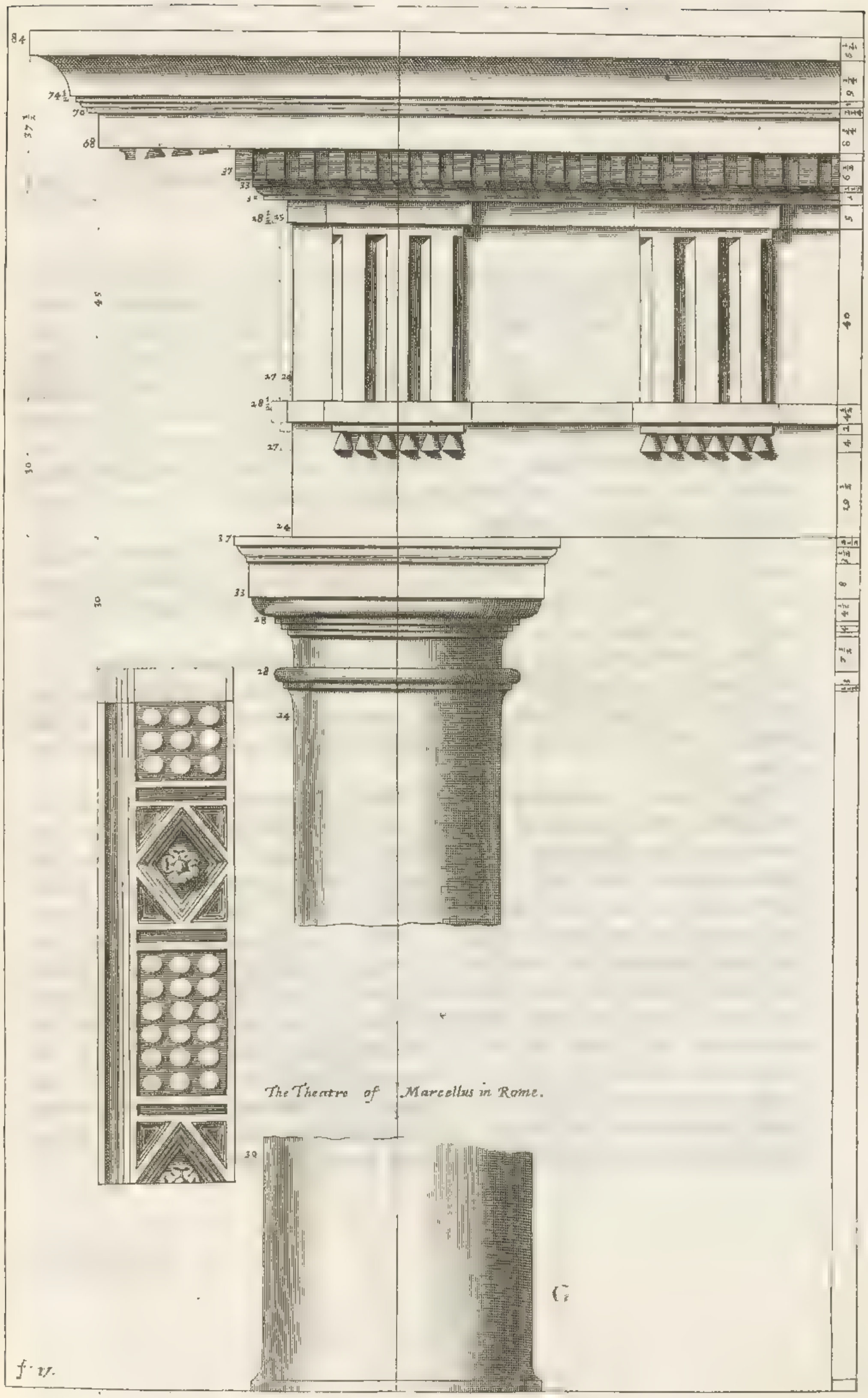
CHAP.

CHAP. III.

A Particular remarkable in the Profile, *drawn from the* Theatre *of* Marcellus.

I Admire, that of all our Modern *Architects*, the greateſt part whereof have ſeen, and ſpoken of *this* Example, as of the moſt excellent *Dorick* Model which has been left us by the Antients, there is not ſo much as one of them who has follow'd, or perhaps well obſerved in the Original the juſt *Compartiment* of the Members of the *Capitel*, nor the Height of the *Freeze*, the which I find *here* viſibly leſs than that which they allow to their Deſigns; though ſome of them (particularly *Vignola*) have propoſed the very ſame *Profile* for the Rule of the *Order*; but with ſo much alteration in its Members, that there is not one of them remains entire: A Man ſhall eaſily find it by conferring them together; all the *Deſigns* of this *Aſſembly* being therefore fitted to the ſame *Scale*. As for the *Capitel*, they do all without Exception, affect the dividing of it into three parts, as *Vitruvius* will have it in his *fourth Book*, *Chap.* 3. giving one to the *Hypotrachelion*, or Neck of the Pillar; the other to the *Echinus*, Bracelets, or ſmall Mouldings; and the third to the *Abacus* or *Plinth* of the *Capitel*; whereas they ought to have conſider'd, that the *Text* of this *Author*, beſides that it is oftentimes ſuſpicious, and eſpecially *then* when he is not conformable to the Practice of the *Antient Maſters* his Contemporaries, it is by no means juſt, that he ſhould preſume thus to carry it againſt ſuch Examples as this here, which is without all Reproach and Exception. It had been more reaſonable that they who propoſe it for their Model, had at leaſt been ſo diſcreet as to have added nothing, but left him in his original Proportion. As for thoſe others, who have formed Deſigns after their own Fancies, they are no more to be blamed for having follow'd the Opinion of *Vitruvius*, and oblig'd themſelves to the Terms which he has preſcrib'd, though they might haply have well diſpens'd with it, and with more Reaſon have imitated the *Antients* where this Irregularity is not to be found. The *Crown* of the *Cornice* is alſo ſufficiently obſervable for its extraordinary Projecture, and which is after a ſort augmented by the Sloops which the *Architect* has given to the *Drops* which compoſe the Ornament of the nether Face, and which fall on the *Triglyphs*. Now albeit this piece of *Opticks* be admirable in this huge *Coloſs* of *Building*, yet is it by no means to be indifferently us'd every where, and upon all occaſions; for in places much incloſed, where there is not ample ſpace and freedom for the Eye, as the inſide of *Churches*, &c. it would produce but an ill effect. Wherefore I have thought it neceſſary to propoſe *here* divers *Antient Examples* upon each *Order*, that I may thereby give opportunity to thoſe of the *Profeſſion* to make uſe of them judiciouſly, regard being duly had to the Place, and the Occaſion.



The Theatre of Marcellus in Rome.

CHAP. IV.

Another Profile *taken from the* Fragment *of the* Dioclesian Baths *at* Rome.

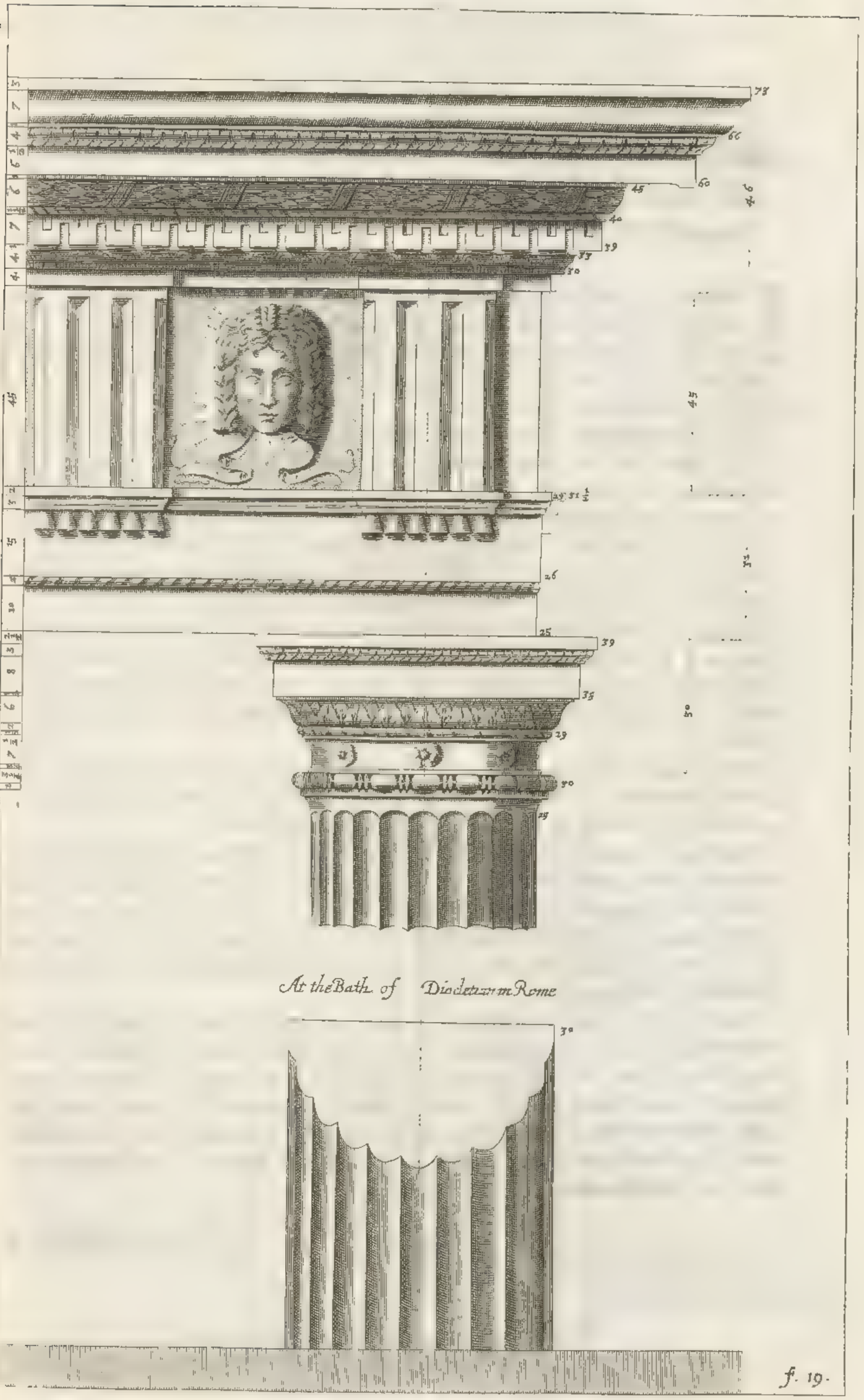
THIS *Profile* was one of the most excellent Pieces of *Architecture* in the *Baths* of *Diocleſian* as far at leaſt as I am able to conjecture from a good number of *Draughts* which lie yet by me, all of them deſign'd by the ſame Hand very neatly, and meaſur'd with extraordinary Study; altho' ſome of them methinks appear to be ſufficiently Licentious. But this *Profile* is of ſo noble a Compoſition, and ſo Regular, that it's nothing inferiour to that which went before: And though the ſpecifick Properties of this *Order* are to be Single and Solid, yet are the Ornaments here ſo very judiciouſly applyed upon every of the Members, that they conſerve the one, without the leaſt violation to the other.

It may ſerve upon ſome occaſions, where that of the *Theatre* of *Marcellus* would not be ſo proper, inaſmuch as the Projecture of its *Cornice* is a great deal leſs; add to this the Curioſity of its *Mouldings*, which allure the Eye to conſider them at a nearer diſtance.

The general Proportion of it is not abſolutely conformable to that of our firſt *Example*; and the Difference makes me judge, that the *Column* belonging to it contain'd eight *Diameters*; that is to ſay, ſixteen *Modules*; for ſo the *Entablature* (which is of four *Modules* high) comes to make up a fourth part of the Pillar.

That which is conſiderable in this *Profile*, as univerſally obſerv'd by all the *Moderns* for the height of the *Freeze*, is, that in this Partition of the three Members of the *Entablature*, the flat *Fillet* which forms the *Capitel* of the *Triglyphs* compoſes a part of the *Cornice*, and is not compriz'd within the limits of the *Freeze*; though in that of *Marcellus*'s *Theatre*, I have made it to be a part, to the end we may religiouſly preſerve our ſelves within the Terms of the general Rules of the *Order*, which preciſely requires, that the height of the *Freeze* ſhould be of one *Module* and a half, that ſo the ſquare Intervals of the *Metops* ſhould be of one *Module* with the *Triglyphs* (which is indeed an Inconvenience very great, but withal moſt neceſſary) may be handſomely adjuſted. To the reſt, I will not affirm poſitively, that the *Column* of this *Profile* was without a *Baſis*, for my Deſign gives me only the *Entablature* and *Capitel*; though I might well be inclin'd to think ſo, for the Reaſons before deduc'd, and amply demonſtrated in the ſecond Chapter.

CHAP.



At the Bath of Diocletian in Rome

f. 19.

CHAP. V.

Another very antient Profile *after the* Grand Maniere *elevated in* Perſpective, *and now extant at* Albano *near* Rome.

I Conceiv'd it very advantageous, and indeed in ſome ſort neceſſary, the better to repreſent the Beauty and goodly Effect of this *Profile*, to give you *one* elevated in *Perſpective*; becauſe I would gratify the Eye with as much as *Art* is capable to add to the real and natural *Relievo*, and ſhew how it ought to ſucceed in the Execution.

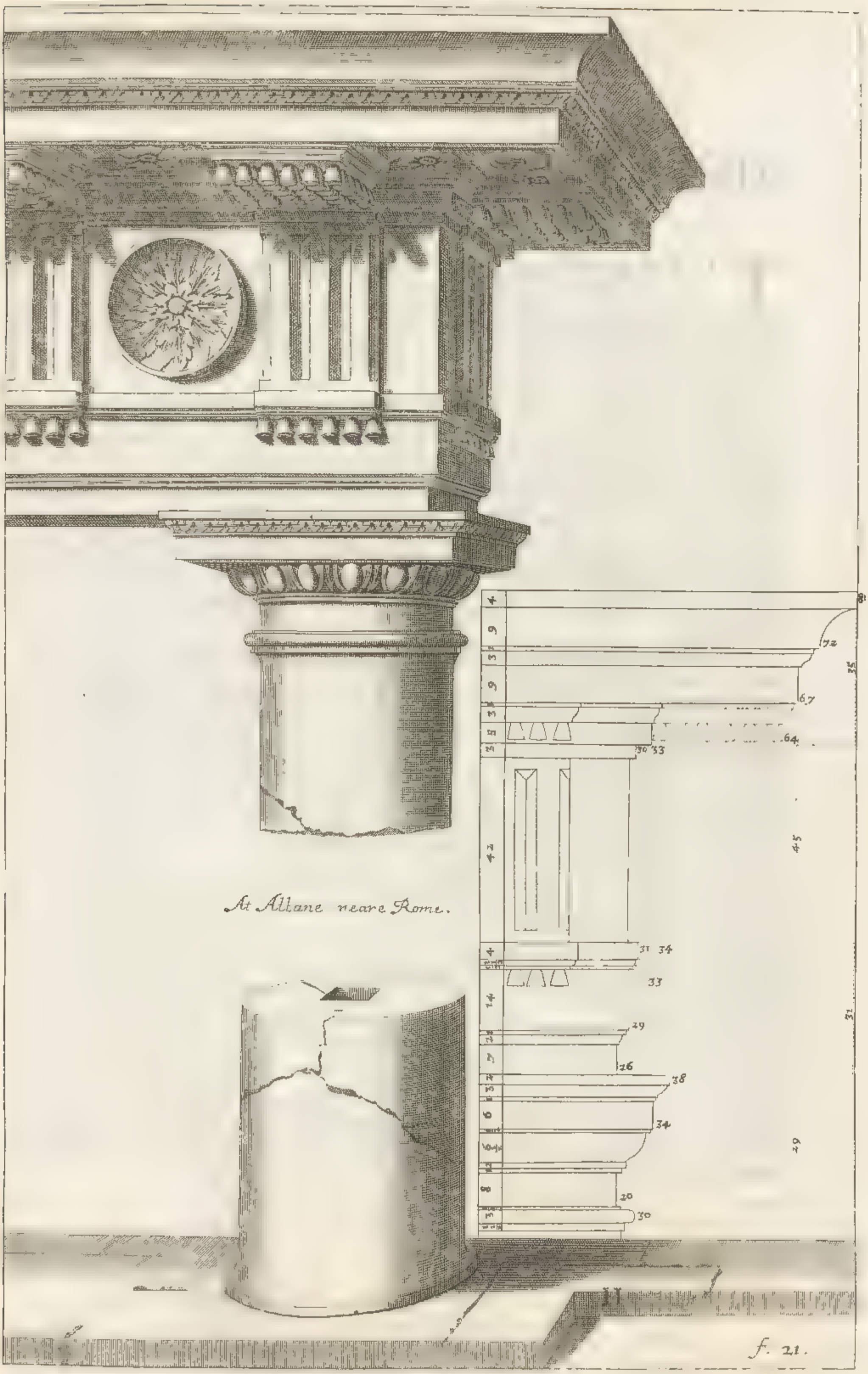
This incomparable *Dorick* Maſter-piece was diſcover'd at *Albano*, joining to the Church of St. *Mary*, among which divers other old Fragments of *Architecture*, very curious, and of which I have a good number deſign'd, and with great diligence examin'd as to their Meaſures, though drawn ſomething in haſt as it were in paſſing, by the hand of the famous *Pyrrho Ligorio*.

That which I particularly eſteem in this, is a certain *Grandeur* of *Manner* majeſtical and ſurpriſing, which is altogether extraordinary; all which reſults from its having but few Members, and from the largeneſs of thoſe which it has; an Account whereof I have already given, ſpeaking of the Difference of *Manners* in the ſecond *Chapter*. For the reſt, the *Shaft* of the *Column* ſtands ſimply on a Step, which ſerves it inſtead of a *Plinth*, as I have here repreſented it.

Now to the end this *Deſign* may not only prove agreeable to the Eye, but likewiſe profitable to thoſe who ſhall deſire to put it in Practice, I have alſo accompanied it with its *Profile*, and particular Meaſures.

I advertiſe moreover, that the *Pilar* has fifteen *Modules* in height, and the *Entablature* three, with two thirds, which amount juſt to the Quarter, which is the regular Proportion of the *Dorick Entablature* with the height of its *Column*. I have omitted the *Profile* of the *Capitel* for want of ſpace, as likewiſe for that it is ſo little differing from the Ordinary in its Mouldings, and ſo perfectly reſembles it in Proportion.

That which is moſt worthy remark, and indeed to be admir'd in this Compoſition, is the Richneſs, and extraordinary Form of its *Modilions*, which lying plumb over the *Triglyphs*, and being as it were a kind of *Capitels* to them, produce a marvellous Effect, which is much augmented by thoſe great *Roſes* of the *Sofitto* or *Eves* of the *Corona*, which having an extraordinary Projecture, render the *Order* altogether *Gigantick*; and this is properly that which they term the *Grand Maniere*.



At Allane neare Rome.

f. 21.

CHAP. VI.

A Judgment *in general upon all the* Authors *ſummon'd together in this* Collection.

THAT the Reader may now come with ſome kind of Preparation to the particular Examen of the *Deſigns* which follow, I ſhall here endeavour to give him a general Hint of the ſeveral Talents and Abilities which I have remark'd in every one of thoſe *Maſters* we are taking a Survey of in Paragon one with the other.

The firſt of all is, without any Conteſt, the famous *Andrea Palladio*, to whom we are oblig'd for a very rare Collection of Antique *Plans* and *Profiles*, of all ſorts of Buildings, deſign'd after a moſt excellent Manner, and meaſur'd with a diligence ſo exact, that there is nothing more in thatParticular left us to deſire: Beſides, the very advantageous Opportunities which he has had at *Venice*, and in all the *Vincentine*, his Native Country, do leave us ſuch Marks as clearly ſhew'd him not only to have been a Spectator of theſe great *Maſters* of *Antiquity*, but even a Competitor with them, and emulous of their Glory.

The Man who neareſt approaches to him, is alſo another Native of *Vincenza*, *Vincent Scamozzi* by Name, a far greater talker (as well appears in his Books) but a much inferiour Workman, and leſs delicate in point of Deſign: *A* Man may eaſily perceive it by the *Profiles* which he has left us of the Five *Orders*, the Manner whereof is a little dry; beſides that, he is very poor and trite in his Ornaments, and but of an ill *Guſto:* He is notwithſtanding *this*, the neareſt that approaches him as to the regularity of his Proportions, and the moſt worthy to be parallel'd with *Palladio.*

Sebaſtian Serlio and *Jacomo Barozzio*, ſurnamed *Vignola*, hold of the ſecond *Claſs*; and albeit they have both follow'd contrary Ways, and very different Manners, yet I forbear not to place them in the ſame Range, and am indeed in ſome difficulty to determine which of the two has deſerv'd more of the Publick; were it not that one might ſay, the *firſt* had the good Fortune to work for *Maſters* who needed only to be ſhewed the *Idea* of the things in Groſs, without having any thing to do with the Retail of their Proportions; and that the *other* only propos'd to himſelf the Inſtruction of young Beginners, and to deliver to them the Rules of *Art* and good Deſign: But it had been of excellent Advantage for us all, that *Serlio*'s Book had been deſign'd like that of *Vignola*; or that *Vignola*'s Study and Diligence in ſearching, had been equal to that of *Serlio.*

The

The famous Commentator of *Vitruvius*, *Daniel Barbaro*, Patriarch of *Aquilea*, with very great juſtice we may fitly ſtyle the *Vitruvius* of our Times, ſhall in this place be ſeated in the middle of all the *Maſters* to be their Preſident, as being indeed the *Interpreter* and *Oracle* of the very Father of *Architects*, and his Companion *Pietro Cataneo* (whom I aſſign only to preſerve an equal Conformity in my Deſigns of comparing Modern *Authors*) ſhall ſerve only as a petty *Chaplain* in the Retinue of this great *Prelate*, though he might well claim *Peerage* even with the moſt part of the reſt.

Among the other latter four, I have a particular Eſteem for *one* above the reſt, and that is *Leon Baptiſta Alberti*, the moſt antient of all the Moderns, and haply too, the moſt knowing in the *Art* of *Building*, as may be eaſily collected by a large and excellent *Volume* which he has publiſhed, wherein he fundamentally ſhews whatever is neceſſary for an *Architect* to know. But as to the *Profiles* of the *Orders* themſelves and his Regulation of them, I cannot but ſtrangely admire at his negligence in drawing them no more correctly, and with ſo little Art, himſelf being a *Painter*; ſince it had ſo notably contributed to its Recommendation, and to the Merit of his Works. But this I have reform'd in our following *Collection*, and believe in ſo doing to have perform'd him no little Service, as haply in danger to have otherwiſe never been follow'd; there being hardly any appearance, that whilſt the Deſigns of his *Book* were ſo pitifully drawn, being made uſe of in Work, they ſhould ever produce ſo good Effect.

To the moſt *Antient* I would aſſign for *Co-rival*, the moſt *Modern*, that by confronting them to each other, we might the better come to diſcover whether the *Art* itſelf improve and proceeds to any further Perfection, or does not already begin to impair and decline. This laſt Author, namely *Viola*, is of the *Categorie* of thoſe which the *Italians* call *Cicaloni*, eternal Talkers to no Purpoſe. He, whilſt he propoſes to himſelf to write of the *Orders* and *Proportions* of *Architecture*, of the *Rules* of *Perſpective*, of ſome *Elements* of *Geometry*, and other the like Dependencies on his principal Subject, amuſes himſelf, poor Man, in telling Stories; ſo that inſtead of a Book of *Architecture*, he has made (e're he was aware) a Book of *Metamorphoſes*. Beſides, he has *this* in common with *Leon Baptiſta Alberti*, that his Deſigns are both very ill contriv'd and executed, notwithſtanding he follows a more elegant Manner, and conformable enough to that of *Palladio*; but the *Method* which he uſes in his Partitions, is ſo Groſs and *Mechanick*, that he reckons all upon his Fingers, and ſeems to have never ſo much as heard ſpeak either of *Arithmetick* or *Cyphers*.

Concerning the two which remain, a Man cannot well affirm them to have been inferiour to thoſe who preceded them, nor yet to have been of the ſame force with the firſt, though I conceive they may well compare with three or four of them at leaſt. And,

Theſe are two *French* Maſters ſufficiently renown'd both by their Works and Writings, *Philibert de Lorme* and *John Bullant*, whom yet I do not here place in the laſt Range, as being at all their Inferiours; but only that I may ſeparate them from the *Italians*, who are in far greater Numbers.

CHAP.

CHAP. VII.

Palladio *and* Scamozzi *upon the* DORICK Order.

LET us now then paſs to the Ocular Demonſtration of the precedent *Chapter* by the *Parallel* of the *Architects*, which I have there aſſembled together, and whoſe *Deſigns* I am haſtening to examine, by comparing them with our three *Antique Deſigns*, that according to their more or leſs conformity with theſe Original *Modules*, we may pronounce concerning their Merit, and ſee what Eſteem they indeed deſerve. From this Conſideration it is, that of all the *Choice* of the other *Maſters*, I have extracted *Palladio* and *Scamozzi*, who having propos'd to themſelves the imitation of the *Antient Architects*, by ſtudying thoſe admirable Monuments yet remaining in the City of *Rome*, have follow'd a *Manner* infinitely more noble, and *Proportions* more elegant than thoſe of the School of *Vitruvius*.

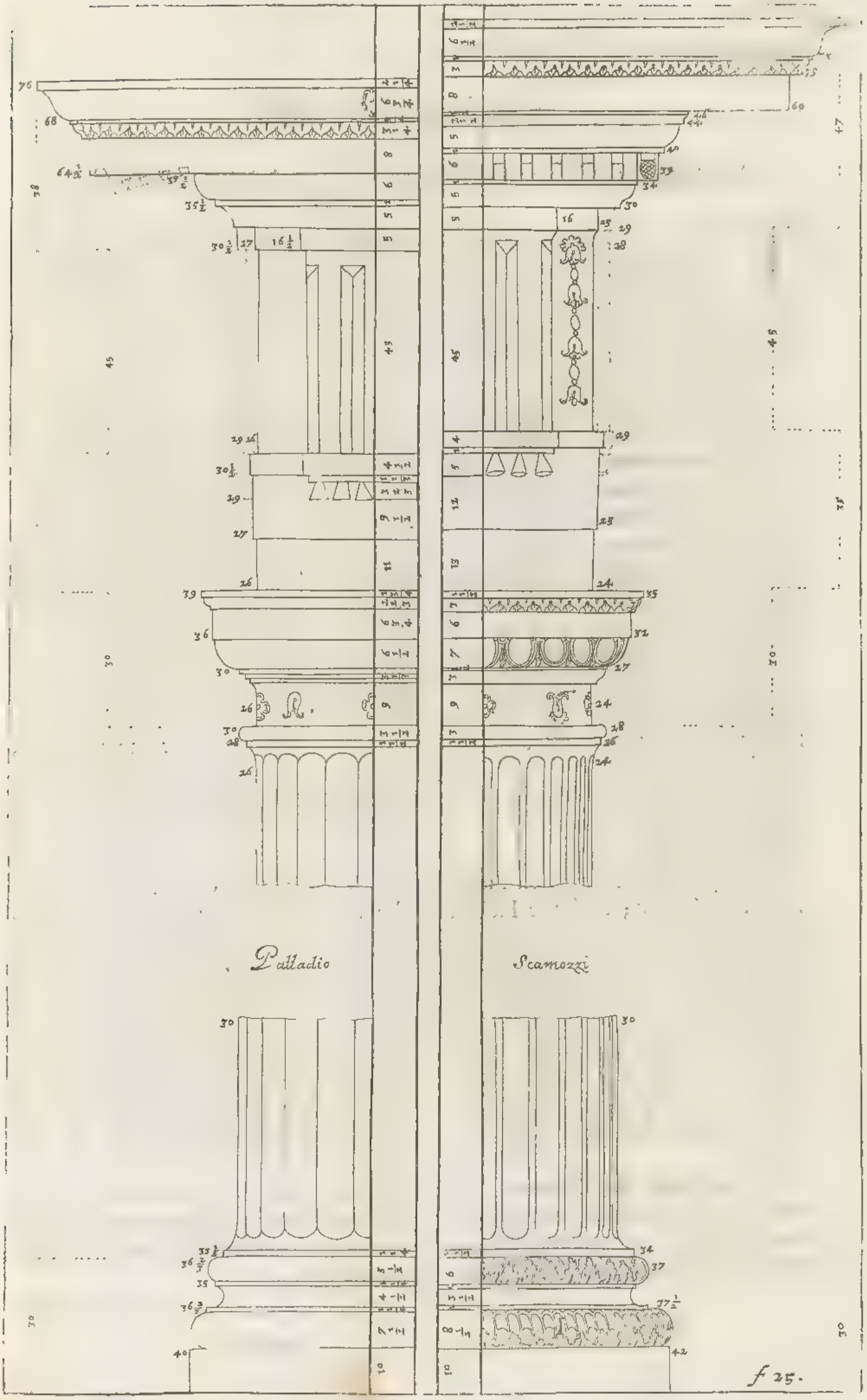
The firſt *Profile* of *Palladio*, hath a great affinity with our ſecond *Antique Example*, taken out of *Dioclefian*'s *Bathes*; for excepting only the *Dentelli* which he may have with reaſon omitted, all the reſt of the *Entablature* is upon the matter the ſame.

He has likewiſe been ſo diſcreet (being peradventure oblig'd to follow the vulgar Error, which will have the *Baſe* of a *Column* of this *Order* to be one with the others) to advertiſe before-hand by an *Example*, which was none at all, that the *Antients* did never uſe it after this manner.

He allows but fifteen *Modules* to the *Column* without *Baſe*, and with its *Baſe* he makes it of ſixteen, and ſometimes proceeds even to ſeventeen and a third. The reſt of the Meaſures are ſo diſtinctly mark'd upon the *Profile*, that it were ſuperfluous to explain them.

Scamozzi gives ever preciſely ſeventeen *Modules* to his *Columns*, accommodating it with the ſame *Baſe* that *Palladio* does; but to a great deal leſs purpoſe, inaſmuch as he thinks fit to deck the *Tore's* with I know not what delicate *Foliages*, which does not at all become the *Order*, no more than does the *Ionick Fluting*, which is abuſively employ'd in this place inſtead of the natural *Dorick*. His *Entablature* (as well as that of *Palladio*) ſufficiently reſembles our ſecond *Module*, to which he has only added a ſmall Cavity betwixt the *Corona* and the greater Round, a thing not at all conſiderable.

The Compoſition of his *Profile* taken in groſs, and altogether ſimple, appears of a very great *Idea*, but the Ornaments are to be rejected.



f 25.

CHAP. VIII.

Serlio *and* Vignola *upon the* DORICK Order.

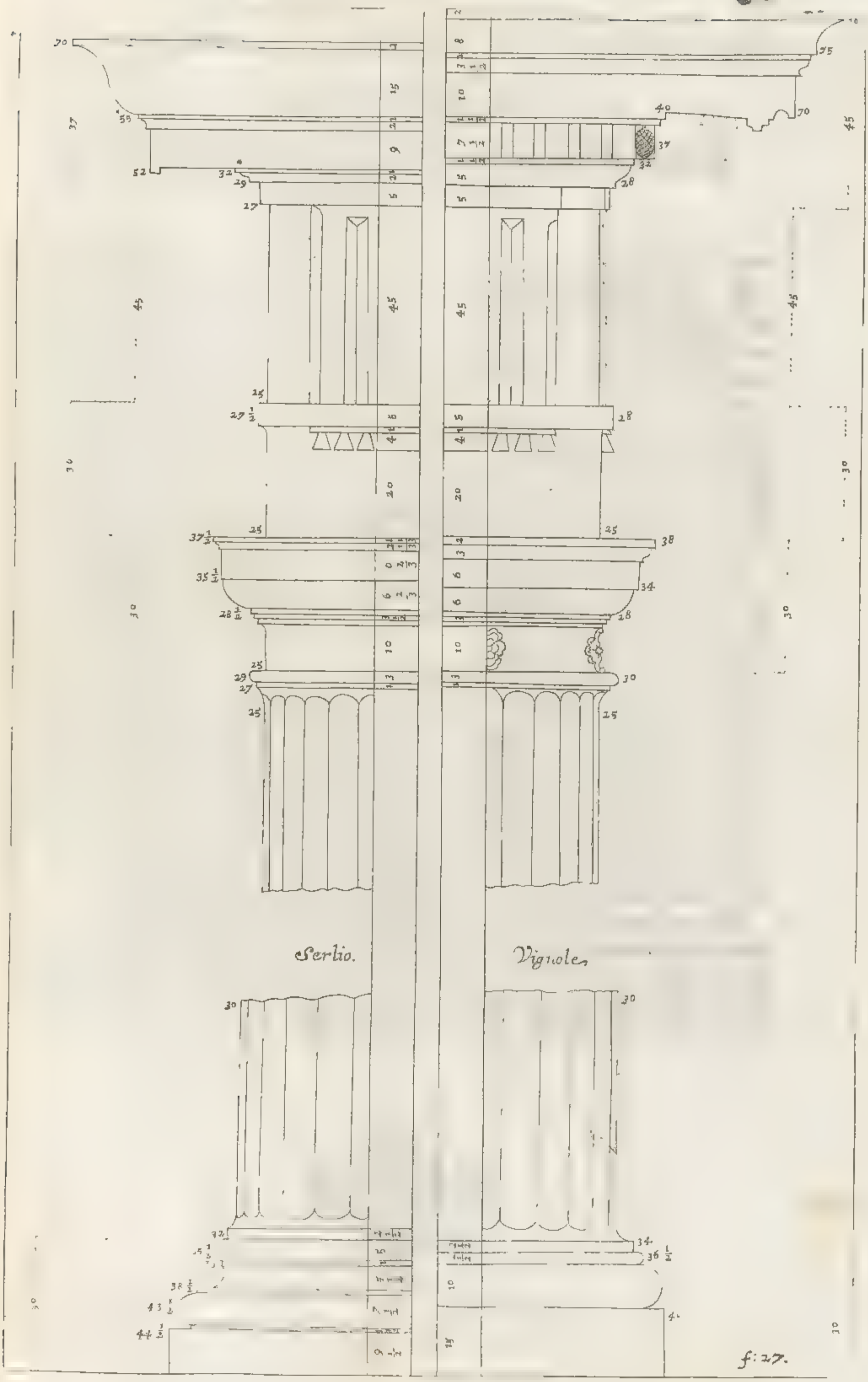
THESE two *Maſters* are infinitely oblig'd to their *Interpreters*, who produced them firſt amongſt the *Tramontani* and Strangers, and particularly to our Workmen in *France*, who hold them in very great Eſtimation: And though they are, in truth, highly worthy of it, nevertheleſs being compar'd to the preceding *two*, they loſe much of their Luſtre, and come exceeding ſhort of them.

This the *Reader* may eaſily find by comparing the one to the other with the Antients *Originals*, which I have prefix'd as the *Lantern* and *Compaſs* of all true *Architecture*. But it were not juſt we ſhould treat *Serlio* in this *Examen*, with the ſame rigour we have done his Companion; for that intending to follow *Vitruvius* (who is the moſt renown'd and venerable *Author* of the *Antients*) he has worthily acquitted himſelf: Whereas *Vignola* who has purſu'd another Courſe, really a more noble, and the very ſame which I alſo obſerve here, knew not how to proceed without Deviation. The *Dorick* Profile which he here preſents us, is taken out of the firſt Order of the *Theatre* of *Marcellus*, and the moſt worthy Example of this kind, which is to be met with amongſt all the *Roman Antiquities*, and of which alſo I have made choice for the firſt Model of this *Collection*, with this only difference, that I have preciſely obſerv'd all the Meaſures and Allowances of the Original, which you will perceive in this *Author* to be exceedingly changed, particularly in the *Cornice* and *Capital*. The comparing of the two Deſigns, will in one inſtant afford more light to the Reader, than I can do by the Diſcourſe of an entire *Page*.

Serlio gives here fourteen *Modules* only to his *Column*, comprehending the *Baſe* and *Chapter*; and the Height of the *Entablature* amounts to three *Modules* and a little more than two thirds, inſomuch as (contrary to his ordinary Cuſtom) he extremely exceeds the quarter of his *Column*, which is the largeſt Proportion the *Antients* did ever Practice; ſo as this great Exceſs puts me in doubt whether the Text of *Vitruvius*, upon which he relies, be not corrupted in that place; or elſe when he ſpake of that *Column*, he did not mean the *Shaft* without its *Capital*: For ſo by adding one *Module* more (which is the preciſe Height of the *Chapter*) the entire *Column* would be fifteen *Modules*, and conſequently the *Entablature* hold Proportion conformable to the *Antients*.

Vignola forms his *Column* of ſixteen *Modules*, and the *Entablature* of four, which is exactly the fourth part of the *Column*, and which makes it appear very regular. As touching the *Baſe* introduc'd by the *Moderns* into this *Order*, I have already declar'd my Opinion concerning it.

CHAP.


Serlio.
Vignole.
f: 27.

CHAP. IX.

Daniel Barbaro *and* Pietro Cataneo, *upon the* DORICK Order.

THIS is here a perfect *School* of Father *Vitruvius*, whose very Name and Authority does extremely recommend it to us. Not that we are oblig'd indifferently and without choice to follow all those who pretend to have understood this grave and abstruse *Author*, seeing every Man strives to make him of his own Party, and to accommodate him to his particular Genius.

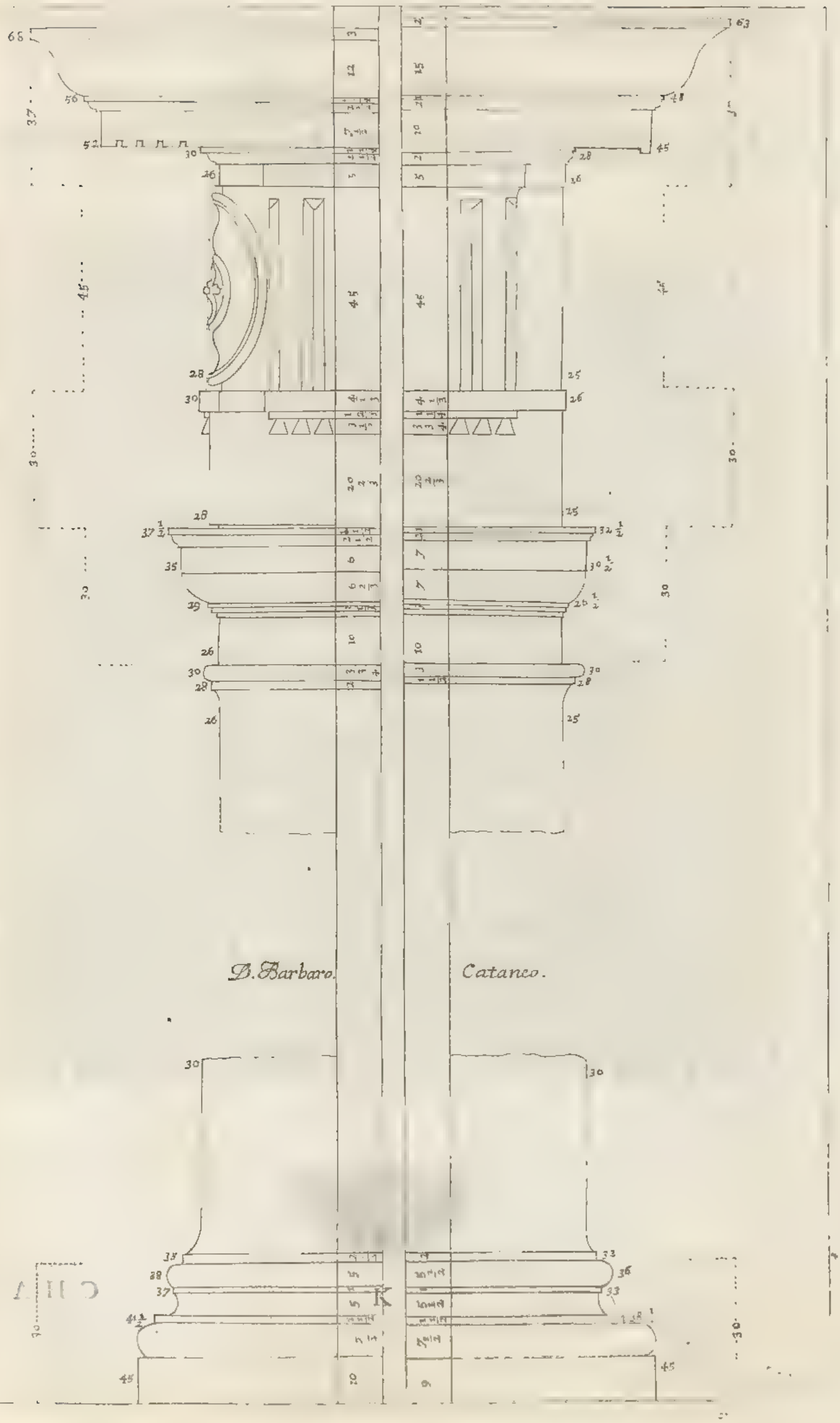
The very best of them all, was, without Exception, *Daniel Barbaro*, as well for his Excellent *Commentaries*, as for the Exactitude and Cleanness of his *Designs*. A Man may perceive by the *Parallel* of his *Profile* with *that* of *Cataneo*, that his Adjunct of *Serlio* in the Page before, and some following his *Class*, that he presides here as a *Master* among his Disciples.

It were an Amusement to no purpose, and very impertinent, should I quote every minute and small Difference of one *Design* from the other, since the *Reader* may better see it by one cast of his Eye, than I can describe it to him in the rest of this Page.

I will add only his general Advertisement, that the Proportion of the *Column*, with its *Entablature*, is the same *here* which *Serlio* gave us before, without being necessitated to repeat my own Opinion thereof, since my Observation is upon *Vitruvius*, and not against those who have explained him.

Daniel Barbaro has judiciously introduc'd a *Buckler* in the Angular *Metop* of the *Freeze*, thereby signifying, that all Ornaments should be accommodated to the *Orders* which they are applied to; and that this being of a robust and martial Kind, one may, as occasion requires, enrich it with *Trophies* of *Arms*, *Clubs*, *Quivers* of *Arrows*, and such like Instruments of War.

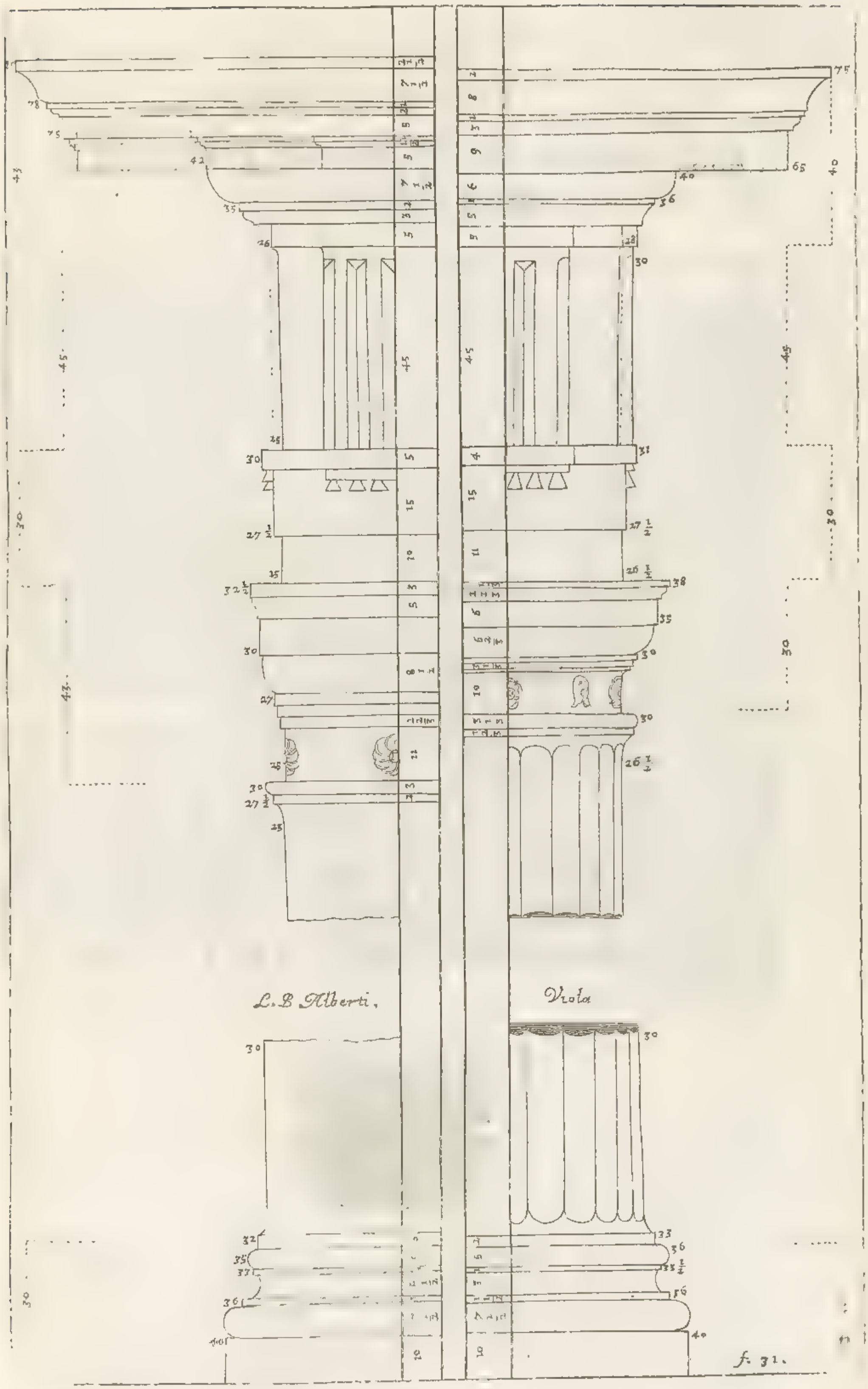
To the Prejudice of *Cataneo*'s Design, I find that the *Gula* of the superiour Part of the *Entablature* is somewhat too great; that the *Projection* of the *Plinth* of the *Capital* is a little too small, and renders the whole *Chapter* mean and short, which extremely disfigures his *Profile*; besides that, the *Base* below has that Excess, which is defective in the *Chapter* above.


D. Barbaro.
Catanco.

CHAP. X.

Leon Baptiſta Alberti *and* Joſepho Viola, *on the* DORICK Order.

AT ſight of this firſt Deſign of *Leon Baptiſta Alberti*, whoſe *Capitel* is entirely *Gothick*, one might with reaſon wonder why I ſhould ſpeak ſo advantageouſly of him in the general Examen which I have made of the Modern *Architects*, among whom I aſſign him one of the principal Places; and in earneſt I cannot excuſe him *here* of that ill Reliſh, and of this ſo ill-favour'd a Compoſition, however he pretends to have ſeen it, and to have taken it from ſome *Antient* Fragments: But ſuppoſe it true (for a Man may meet with bad ones enough) he might alſo have found others a great deal more tolerable: That which falls out the moſt unluckily for him in this his firſt Production of Skill, is, that it is of very great Importance for a Man to begin well, ſince the firſt Impreſſion continues long, and introduces a Conſequence for thoſe who follow after. Nevertheleſs, be it what it will, every Man is oblig'd to accord with the Truth, and to judge of things honeſtly and without Prejudice. And therefore to do him juſtice, having firſt condemn'd this defective Part in his *Profile*, we are not to reject all the reſt for that reaſon, ſeeing it is in Truth of a great and noble Manner. It has alſo much Conformity with our *Antique Example* in the *Modilions*, whoſe Projectures put into Work, would produce a noble Effect, as may be judg'd by the *Perſpective* which I have made of it. His *Architrave* and *Freeze* are both regular, and the *Entablature* entire to its exact Proportion with the *Column*; for it conſiſts of four *Modules* in Height, and the *Column* of ſix. The Proportions of the *Baſe* are likewiſe very handſome; ſo as in the whole Deſign there is nothing ſcandalous beſides the *Capitel*, which may eaſily be ſupplyed by borrowing from his Collegue *Viola*, whoſe *Profile* is ſufficiently correct, and upon the Matter the very ſame with that of *Palladio*, whom I perceive he has imitated in all the following *Orders* as well as in this here. But ſince he endeavours to diſguiſe his Theft as much as poſſible, in altering ſome of the Moldings, or mutilating ſome Member, he has here made a Quarter Round inſtead of a direct *Cymatium*, or *Ogee*, of the *Cornice*, which is but a thing indifferent, or tolerable at leaſt, in the *Dorick Order*, that of *Marcellus*'s *Theatre* being the very ſame.

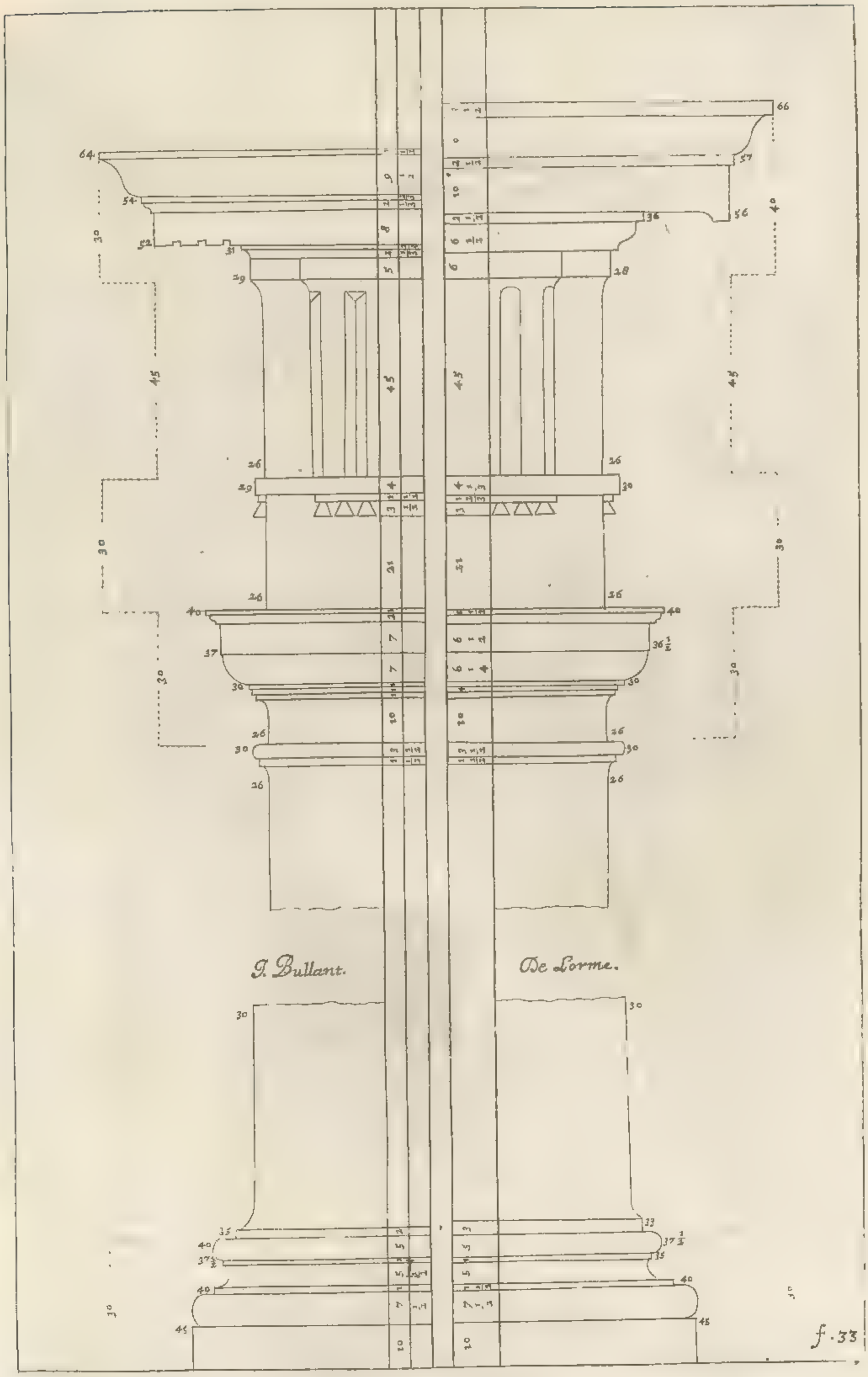

L. B. Alberti.
Viola
f. 31.

CHAP. XI.

John Bulliant *and* Philibert de Lorme, *on the* DORICK Order.

THIS not without ſome difficulty that I have been able to reduce a ſecond *Profile* of this Page to the Terms you here behold it; *Philibert de Lorme* having deſign'd it ſo ſlightly, and in ſo ſmall a Volume (though that in his Book be large enough) that it had been impoſſible to give any of the Members its due Proportion without the Aſſiſtance of the Text, upon which he has made three large *Chapters*; whereas by the Aid of ſome better Draught, he might eaſily have ſpar'd many Words and Letters of Direction extremely confus'd throughout his whole Diſcourſe, which he uſes to expreſs the Particular of the Proportions of each part of his *Profile*; and this makes me judge that the good Man was no *Deſigner*, which is a very ordinary Defect amongſt thoſe of his Profeſſion. But this does not much concern our Subject in hand, where we have only to examine, whether the *Dorick Order*, which he propoſes, has any conformity to the *Antique*, or at leaſt to the Precepts of *Vitruvius*; as one may perceive by the *Parallel* of his Companion *John Bulliant*, who has followed this old *Author* in his *Profile* very punctually, though he alſo produces others from *Antiquity*, in which I find him not ſo juſt and exact, as I took him to be in the meaning of *Vitruvius*.

I will not here ſtand to particulariſe the Difference which there is betwixt theſe two *Architects*, leſt I myſelf fall into the ſame Inconvenience which I but now reprehended in *Philibert de Lorme*; and for that the Exactneſs of my *Deſigns* have neither need of Illuſtration or Diſcourſe: However, this I may add in favour of *John Bulliant*, that he is the ſole Sectator of *Vitruvius*, who has contain'd himſelf within the regular Terms of his *Maſter*, as to the Height of the *Entablature*, to which he allows three *Modules* and a half, that preciſely make the fourth part of the *Column*, which ought to have but ſeven *Diameters* in Height, according to *Vitruvius*, *Lib.* 4. *Cap.* 1. which amounts to fourteen *Modules*.


J. Bullant.
De Lorme.
f. 33

CHAP. XII.

A very antient Sepulchre *to be ſeen near* Terracina, *on the Side of the High-way leading towards* Naples.

AT *Terracina*, upon the Confines of the *Eccleſiaſtick State*, there is yet extant the *Veſtigia* and Foot-ſteps of this ſmall *Mauſoleum*, ſufficiently entire, joining to the *Appian* Way, where that diligent Obſerver of all theſe antient Monuments, *Pirro Ligorio* having diſcover'd, and (as one may ſay) diſinterr'd it (for 'twas almoſt buried amongſt the Brambles of a wild and uncultivated Place, as himſelf reports, at the Foot of the Deſign which he has made of it) took the *Plan* moſt exactly, and the Elevation of the *Profile*; upon which I have taken my Directions to reduce it to that *Ichnographical* Form which I here preſent you. I was extremely glad to encounter an Example ſo expreſs and convincing againſt the Abuſe of the *Moderns*, who have very inconſiderably introduc'd *Baſes* to the *Columns* of this *Order*, of which I have formerly diſcourſed ſufficiently.

The four *Faces* of the Edifice appear to have been all alike; and on that which reſpects the *Weſt*, there has been ſome kind of *Inſcription* upon the *Architrave*; but there now remains nothing legible.

The *Maſonry* is of a huge ſquare *Brick*, and the *Columns* with their *Entablature* are made of *Tiburtine* Stone, the *Pyramid* being alſo of the ſame Material.

The *Diameter* of the *Columns* is near upon two *Palms*, the *Entablature* makes a fifth of the entire *Order*; that is to ſay, a fourth part of the *Column*, which was but ſeven *Diameters* in Height.

This *Sepulchre* ſeems to be full as antient as the very *Appian* Way itſelf.

F. 35.

CHAP. XIII.

Of the IONICK Order.

THE first Productions of *Arts* have always been exceedingly rare, because it is so difficult to invent; but it is not the same of Imitation: For after Men had once seen regular Structures, and those famous *Temples* of the *Dorick Order* mention'd by *Vitruvius* and some others, *Architecture* did not long remain in its Infancy; the Concurrence and Emulation of the neighbouring People advanc'd its Growth, and made it soon arrive to its Perfection. The *Ionians* were the first Competitors with the *Dorians* in its Divine Art, which seem'd to be descended from the *Gods* themselves, to gratify Mankind with more opportunity of honouring them: and though these had neither the Advantage nor the Glory to be Inventers of it, they endeavour'd yet to improve and raise it even above the very Authors. Considering therefore that the Figure of a Man's Body, on which the *Dorick Order* had been form'd, was of a Shape too robust and massy to fit Holy Places, and become the Representation of *Celestial* Things, they would needs compose an *Order* after their own Mode, and chose a *Model* of a more elegant Proportion, wherein they had more regard to the Beauty than to the Solidity of the Work; which gave the first occasion of calling it the *Feminine Order*, as indeed degenerating towards an effeminate Softness. And the truth is, the *Order* of the *Caryatides* quickly sprung up after it, which was an extraordinary Affront to this poor *Sex*, and a very shame to *Architecture* itself, for having so irrationally employ'd a feeble and delicate Thing to perform an office where Strength and Solidity were the only Necessaries. *Vitruvius* and divers of the *Moderns* since him, mention the Original of this *Order*, and tells us, that the Inhabitants of a certain *City* of *Peloponnesus*, named *Carya*, having made a League with the *Persians* against their own Nation the *Greeks*, after the Rout of the *Persians*, were afterwards besieg'd by the Conquerours, and so barbarously Saccag'd, that putting every Man to the Sword, consuming the City to Ashes, and carrying the Women away Captive, their Vengeance being not yet extinct, they resolved to eternise their Resentment, by causing publick Edifices to be erected, wherein for a Mark of the Servitude of these Captives, they engraved their *Images* instead of *Columns*, that so they might overwhelm *them* likewise under the weight of the Punishment which they had merited by the Guilt of their Husbands, and leave an everlasting Memory thereof to future Ages. This is the Example which *Vitruvius* has made use of to prove how necessary it is that an *Architect* should be knowing in History, to the end he introduce nothing impertinently in his Works, and without good Reason. The *Gothick Order*, which is the Folly and very *Ape* of *Architecture*, in imitation of the *Caryatides* has compos'd certain lame Figur'd *Mutils*, or *Corbells*, instead of *Cartouzes*, substained by I know not what *Chimera's* and ridiculous *Monkeys*, to be met with in every Corner of our old *Churches*; but some of the *Moderns* having (with very good Reason) found fault that such Extravagances should be seen in Holy Places, where Reverence and Modesty are so essential, and considering how much more decent it were to fit those Places with some devout Representati-

ons,

ons, without any reſpect at all to their Profeſſion, or for want rather of underſtanding the Propriety of the *Orders* of *Architecture*, have amuſed themſelves to place the Figures of *Angels* and other *Saints* inſtead of the *Caryatides*; making them like ſo many *Slaves*, to carry huge *Cornices*, and even entire *Altars* upon their Shoulders; teſtifying thereby, how prepoſterouſly and without judgment they conſulted *Vitruvius* upon the occaſion of the Original of the *Caryatides:* For they would otherwiſe have underſtood that this *Order* cannot be employ'd, or indifferently enter into all Sorts of Buildings, and that it requires no ſmall Diſcretion to be aptly and diſcreetly plac'd: Above all, that it ſhould never be us'd in *Churches*, which are the Houſes of *God*, and *Aſſylums* of Mercy, where Servitude and Revenge ought never to appear. They had proceeded much better to have only uſed the plain *Regular Order*, which we are now going to deſcribe according to an excellent *Antique Example*, taken from the Temple of *Fortuna Virilis*, at preſent the Church of St. *Mary* the *Egyptian* in *Rome*, the *Profile* whereof has been fortunately met with amongſt ſome Papers of mine of that great Antiquary *Pyrro Ligorio*, whoſe *Manuſcripts* and *Deſigns* are conſerved as a very rare Treaſure in the *Bibliothique* of the *Duke* of *Savoy*, which has furniſhed me with a Means to examine and verifie divers Meaſures, that at preſent a Man would hardly know where to take; and to repair the *Cornice* with its proper Ornaments, which are now ſo impair'd thro' Age, that it is extremely difficult to diſcern them. This is then the Model I ſhall follow, and which ſhall here ſerve for the *Rule* of this *Order*; having with mature Conſideration, and for divers Reaſons, preferr'd it before that which is in the *Theatre* of *Marcellus*, from whence I have taken the *Dorick*; which nevertheleſs I ſhall propoſe in what follows, remitting others who concur not with my Opinion to their own Affection and Fancy.

But before I enter upon the Retail of its Proportions (for Recommendation of this *Order*, and the Curioſity of the *Reader*) I will here recount to you the Names of ſome famous *Temples* built by the People of *Ionia*, whoſe Antiquity is at leaſt of *Two Thouſand* Years. The moſt Memorable, tho' not moſt Antient, is that Renowned *Temple* of *Diana*, erected (as ſome think) by the *Amazons* in *Epheſus*. This was a Work of ſo ſtupendious a Grandure, that there was ſpent above *Two Hundred* Years in finiſhing it, all *Aſia* contributing to this ineſtimable Expence. *Vitruvius* in his *Third Book*, *Cap.* 1. ſays it was of the *Dipterick* Figure; that is, inviron'd with a two-fold Range of *Columns* in Form of a double *Portico:* It was in length 425 Foot upon 220. All theſe *Columns* were of *Marble* 70 Foot in Height. The *Architect* of this proud Edifice, according to the ſame *Vitruvius*, was one named *Cteſiphon*, whom he mentions in his *Tenth Book*, where he ſpeaks of an excellent *Machine* that he invented to tranſport the *Columns* of this *Temple*; which for being of ſo prodigious a Length, that no ordinary Force was able to move and bring from their Quarries, had been all to no purpoſe, had not this extraordinary *Genius* diſcover'd ſome artificial Forces to ſupply the Defect of others. This Structure is eſteem'd for one of the *World's ſeven Wonders*. There were yet in the ſame *City* of *Epheſus* many other *Temples* of this *Order*; whereof two (one dedicated to *Apollo*, the other to *Bacchus*) are principally remarkable, as having been in ſome ſort comparable to this *firſt*, had they received their ultimate Perfection; but they were left off unfiniſhed, by reaſon of the Wars againſt the *Perſians*, who were in concluſion the utter Ruin and Subverſion of this People: For *Cyrus* having ſubjugated *Aſia*, plun-

der'd all this Country, ſaccag'd their *Cities*, demoliſh'd the *Temple*, and made ſo univerſal and barbarous a Devaſtation; that there hardly remain'd any thing of ſuch an infinity of ſtupendous Monuments, which this noble *Nation* had erected thro'out all *Greece*: Notwithſtanding this, he ſpar'd that of *Diana* of *Epheſus*, whoſe aſtoniſhing Beauty ſerv'd as a *Bulwark* to the Fury and Rage of this mighty Conquerer. In *Athens*, one of the moſt flouriſhing *Cities* of the World, there was alſo of the ſame *Ionick Order* a very great Number of *Temples*, amongſt which, that of the *Delphick Apollo*, and his Son *Æſculapius*, were highly celebrated. There is yet to be ſeen in the ſame Place certain *Veſtigia* reduc'd to the form of a *Citadel*, which they report to have been heretofore the *Temple* of the *Goddeſs Juno Attica*. I could enumerate divers others like theſe, of which the *Antiquaries* we have cited report Marvels; but in general Terms, and without any Benefit to the *Studious* of the *Art*, who ſtand in need of ſome more eſſential Remarks and Inſtructions; I will therefore manage the reſt of his *Diſcourſe* in deſcribing the *Compoſition*, and the Parts of this *Order*, conformable to the *Profile* which I have choſen for our *Model*, and which is preciſely taken from the *Antique*.

CHAP. XIV.

The Ionick Profile *taken from the* Temple *of* Fortuna Virilis *at* Rome, *which is at preſent the Church of St.* Mary *the* Ægyptian.

ACcording to the Opinion of that threefold grand *Antiquary*, *Painter* and *Architect*, *Phyrro Ligorio*, of whom I have heretofore ſpoken, and from whom I have borrowed this *Profile*, I may ſafely propoſe it for one of the moſt regular Examples of the whole *Ionick Order*, which is now extant of antient *Architecture*: Add to this, the Inſtance which *Palladio* makes of it in his fourth *Book*, and thirteenth *Chapter*, being the only one of this *Order*, which he has inſerted amongſt the whole *Collection* of his Studies; ſo as theſe two great *Maſters* approving the Election and Judgment I have made thereof, it is not to be doubted for a *Maſter-piece* of ſupreme Perfection. I will therefore make the general Deſcription thereof, deducing the principal Members and Proportions in Groſs, without amuſing my ſelf with the ſmaller Retail of the Meaſures of each particular Part, which the *Deſign* ought to ſupply.

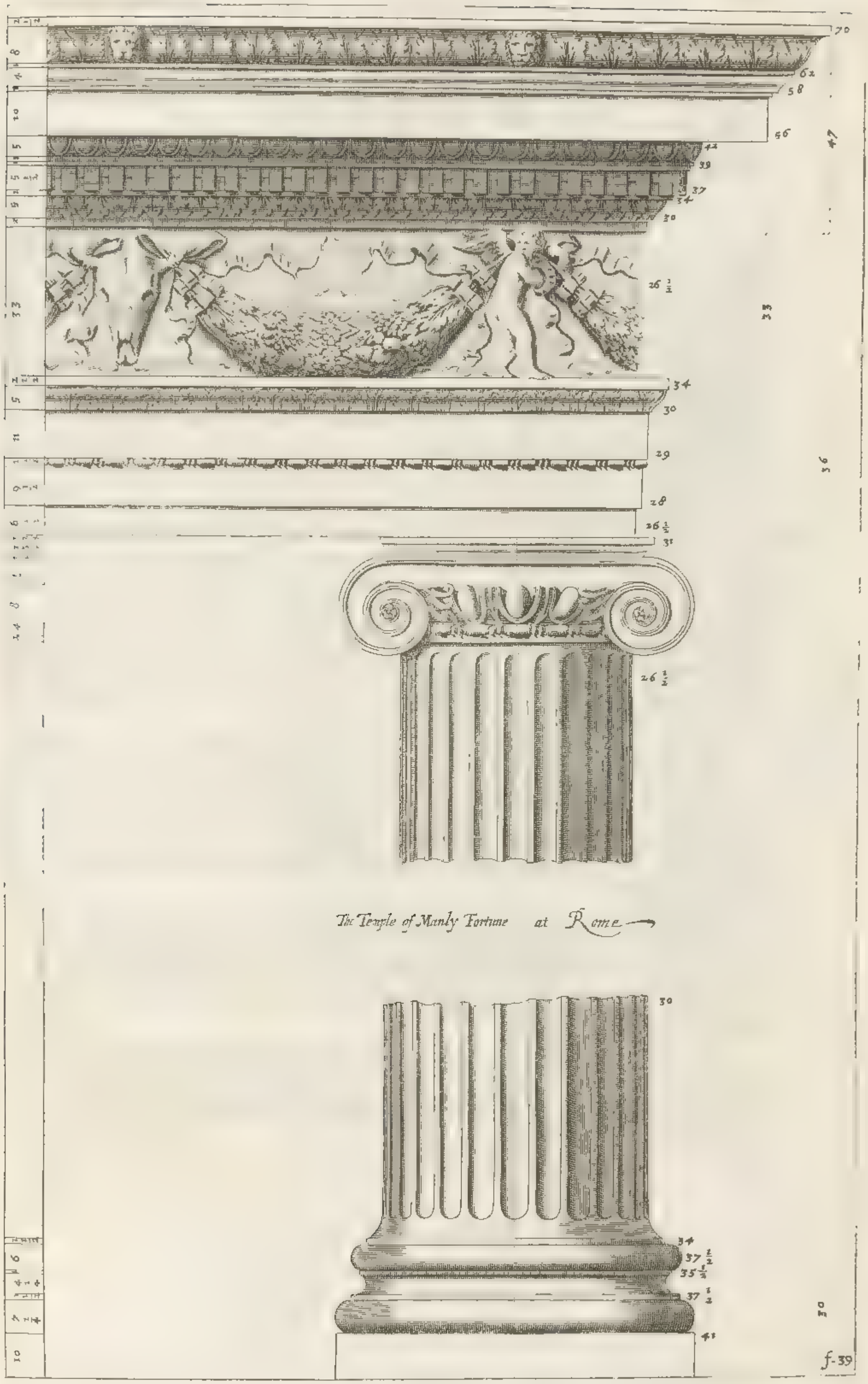
The entire *Order* from the Superficies of the *Area* to the *Cornice*, contains eleven *Diameters* of the whole *Column*, which amounts to twenty two *Modules*.

The *Column* with the *Baſe* and *Chapter* has eighteen *Modules*.

The *Entablature* (that is to ſay, *Architrave*, *Freeze* and *Cornice*) contain four *Modules*, lacking four *Minutes*, which are not conſiderable upon the Total; and this Height making two Ninths of the *Column*, produces a proportionate Mediocrity betwixt that of the *Dorick Order* before deſcrib'd (whereof the *Entablature* compoſes one quarter) and that of the *Corinthian* (as we ſhall ſee hereafter) to which the *Moderns* do ordinarily attribute a fifth Part.

The *Voluta* of the *Capitel* is after an oval Form, producing a very noble Effect, notwithſtanding that none of our *Architects* have put it in Practice; but the reaſon in my Opinion, is, the difficulty of turning it with a Grace, and for that they are generally accuſtom'd to do all with *Rule* and *Compaſs*, which are here in a manner uſeleſs.

CHAP.



The Temple of Manly Fortune at Rome

CHAP. XV.

Another IONICK Profile *taken from the* Theatre *of* Marcellus *at* Rome.

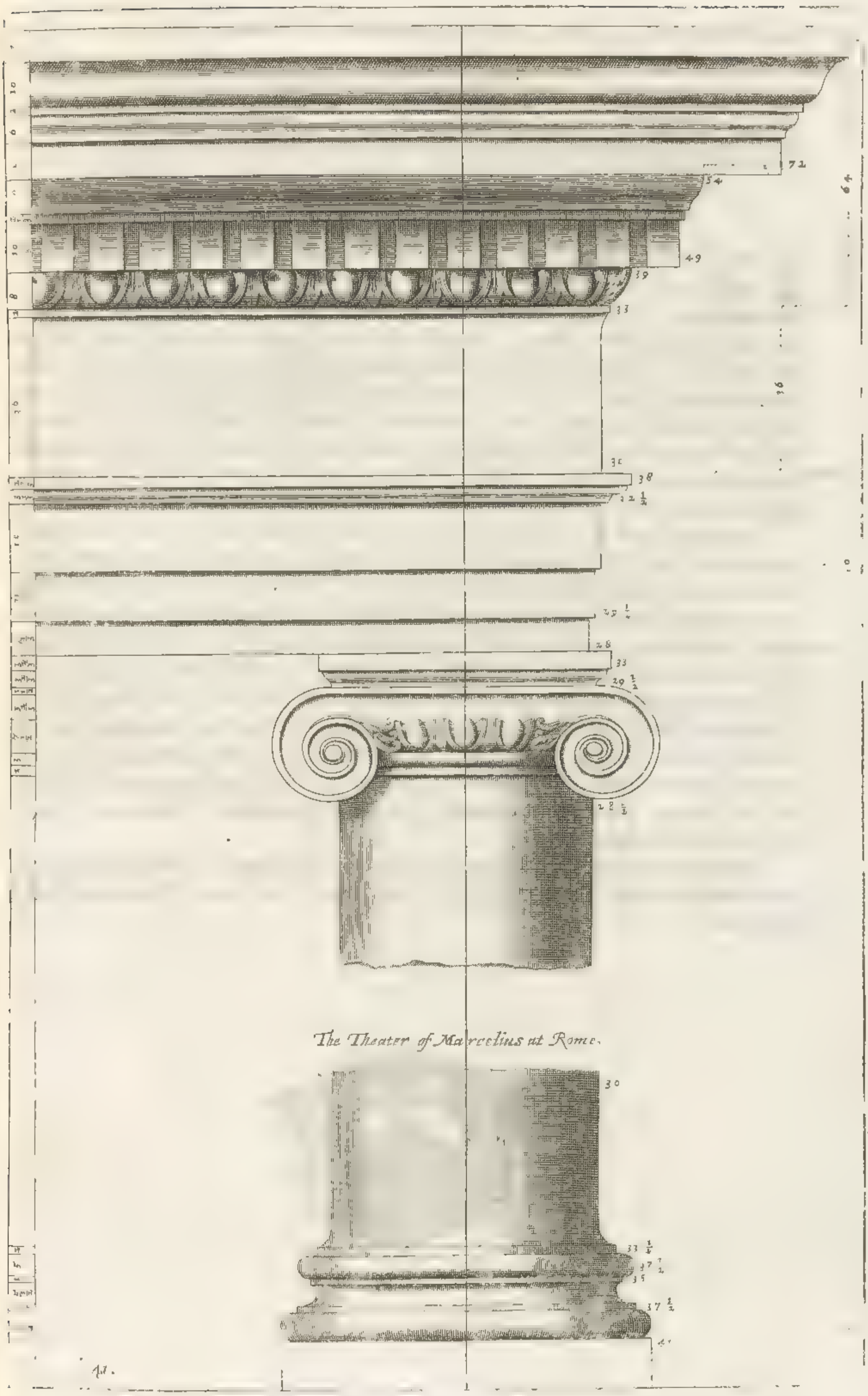
SOME may imagine that I ought to have eſtabliſhed my *Ionick Order* upon this *Example*, being as 'twere the Twin-Brother of the firſt *Dorick* with which I have commenced this *Collection* of *Architecture*, being both of them extracted out of the ſame Edifice, which is the *Theatre* of *Marcellus*. And to ſpeak Truth, it was my firſt Deſign: But ſecond Cogitations being ordinarily the more Judicious, I have ſince conſidered, that the Ampleneſs of *Entablature* with its extraordinary Plainneſs, was a particular Effect of the *Architect's* Diſcretion, who reſolving to place this *Order* in an exceeding large Building, and alſo upon an elevated Place, where the Sight could hardly enjoy thoſe Ornaments wherewithal it is uſually enriched, had regard only to the Reformation of that, by a Rule of the *Opticks*, which the Eye might poſſibly find fault within the Grace of its general Proportions from the Diſtance of its Elevation; ſo that we may affirm of this *Profile*, that it does excellently well in *Work* as 'tis plac'd in the *Original*; but would not ſucceed ſo well in another of more Mediocrity; and above all, in a Work of one only *Order*, unleſs it were of a *Coloſſean* Magnitude; which is yet in truth neither proper nor natural to its feminine Kind: However, I will here preſent you with its Proportions as well as with the others.

The Height of the entire *Order*, is twenty two *Modules*, and two thirds.

The *Column* with her *Baſe* and *Chapter* hath but eighteen, and thoſe preciſe enough; ſo as the whole *Entablature*, conſiſting of four and two thirds, it happens to be of an extraordinary Grandure, in as much as it exceeds a Quarter of the *Order*, which is the largeſt *Proportion* can juſtly be given even to the *Dorick* itſelf.

The *Projecture*, or *Jette*, of the *Cornice* is alſo a little extravagant; but the *Architect* has, for all that, ſhew'd himſelf very Judicious, having reſpect in that to the entire Maſs of the Building, and to the Eminence of the Site of this ſecond *Order*: For the ſame Reaſon he afforded but very little Diminution to the *Column* above.

The *Voluta's* of the *Capital* are Oval, as in the precedent *Order*; and this Shape of the *Voluta's* was much practis'd by the *Antients*; but the Method of turning them with the *Compaſs* is ſomewhat difficult, and has never as yet been demonſtrated.



The Theater of Marcellus at Rome.

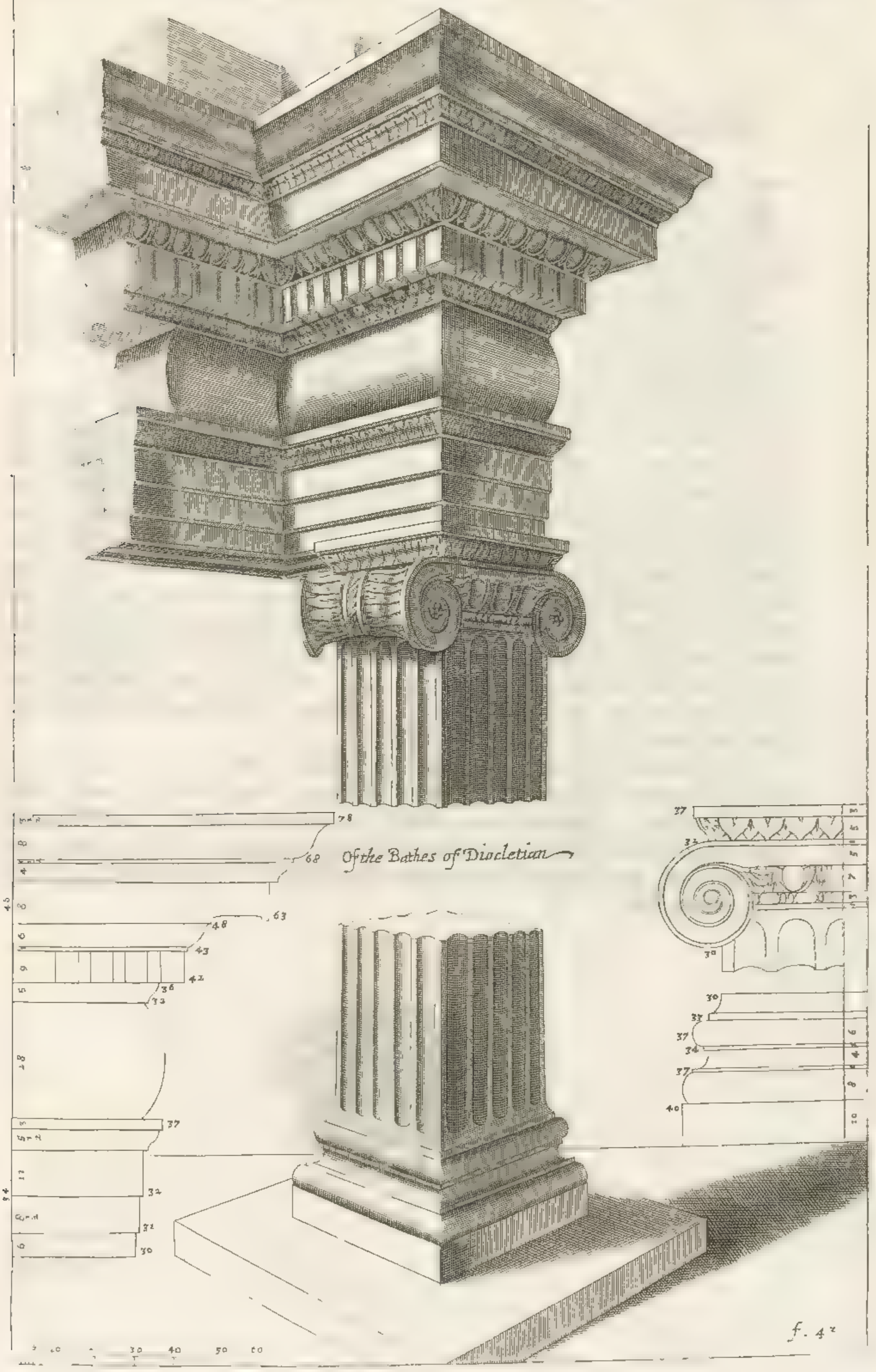
CHAP. XVI.

The Perſpective *Elevation of a* Profile *drawn from the* Baths *of* Diocletian *at* Rome.

I Would needs make an Elevation in *Perſpective* of this *Profile*, that ſo I might add ſome Variety to my Deſigns, and for that likewiſe it is an advantagious means to repreſent the *Idea* of an *Order*, and the effect which it produces being put in Work, for their ſakes who are not much practis'd in the Myſtery. This Piece ſtood in the *Baths* of *Diocletian*, at the *Angle* or *Coin* of the return of a Wall, as I have found out by a *Deſign* of mine, very antient, and of a good Hand, where the Proportions, as well of the *Plan* as of the *Profile*, are exactly noted, even to the leaſt Particulars. I have reduced and accommodated them to the Diviſion of my ordinary *Module*, as you may perceive them on the *Profile* which is under the *Perſpective Entablature*.

The Height of the whole *Order*, from the *Baſe* to the Top of the *Cornice*, amounts to ten Diameters and a fourth; which, according to our manner of Meaſuring, contains twenty *Modules* and a half; which being divided 'twixt the *Column* and the *Entablature*, takes up ſeventeen, and three *Modules* and a half remaining, make up the Height of the *Entablature*: Now though there be a conſiderable difference in the Altitude of our firſt *Ionick Example*, and this *here*, it rather yet conſiſts in the total Quantity of the *Order*, than in the *Proportion* of their Parts; for I find here, that the *Entablature* compar'd to its *Column*, has alſo the ſame relation of two ninths; which is to ſay, that the Height of the *Column* divided in nine Parts, *that* of the *Entablature* comprehends two of them; which is a *Symmetry* particularly affected to this *Order*, as I have elſewhere ſhewed.

The *Voluta*'s of the *Capital* were turn'd with the *Compaſs*, after the manner I ſhall hereafter deſcribe in a Page by itſelf, and with which I ſhall conclude this *Order*.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Of the Bathes of Diocletian
f. 4²

CHAP. XVII.

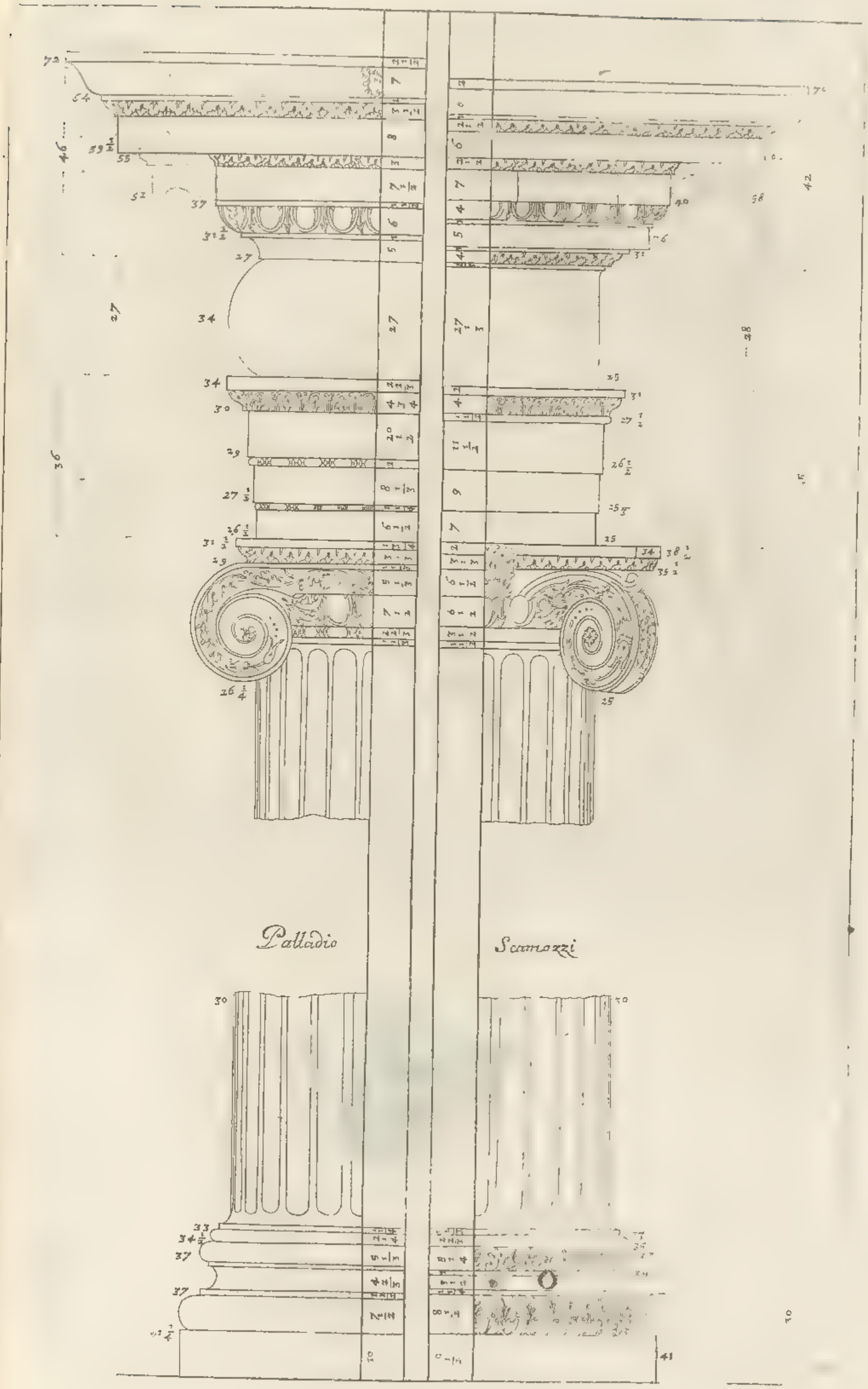
Palladio *and* Scamozzi *upon the* IONICK Order.

THERE is ſo great a reſemblance 'twixt the *Mouldings* and the *Meaſures* of theſe two *Profiles*, that the difference is hardly conſiderable, unleſs it be in the Figure of the *Capitals*, which in truth is very different in Shape, though ſufficiently reſembling in Proportion.

The *Voluta* of *Scamozzi* in particular, and by conſequence hath leſs of the *Antique*, than *that* of *Palladio*. But *Scamozzi* has excogitated this Expedient, that his *Capital* might front on all Sides, not liking (it may be) this variety of Aſpect which we find in the ordinary *Voluta*'s.

The Altitude of the *Column*, according to *Palladio*, contains nine *Diameters*, which make after our Meaſure eighteen *Modules*; of which he gives to the *Entablature* but one fifth Part, being the ſame Proportion which hereafter he aſſigns to his *Corinthian*: He had yet, peradventure, done better to have contriv'd for this here, a more proportionable *Medium* 'twixt the *Dorick* and the *Corinthian*, proceeding by a certain Gradation from the *Solid* kind to the more *Delicate*. Moreover, I could have wiſh'd, that the *Cornice* had rather been *Tooth'd* than *Modilion'd*, for the reaſon already render'd in the general *Chapter* of the *Ionick Order*; which I mention only to Advertiſe (by the way as 'twere) what does in my Judgment ſeem worthy to be obſerv'd in this *Profile*, which in the reſt of the parts is exceedingly rare, and in this very particular not abſolutely to be condemn'd; ſeeing things which may be improv'd, are not therefore to be eſteem'd for ill.

As for *Scamozzi*, beſides that the ſame Obſervations which I have made on the *Profile* of *Palladius* are repugnant to him, there is *this* yet worſe, that the *Capital* being a great deal more maſſy, inſtead of giving a greater Height to his *Cornice*, and compoſing it of more ample Members, he has contrarily made it leſs, and cut off three or four ſmall *Reglets*, which renders it very dry and trifling.


Palladio
Scamozzi

CHAP. XVIII.

Serlio *and* Vignola, *upon the* IONICK Order.

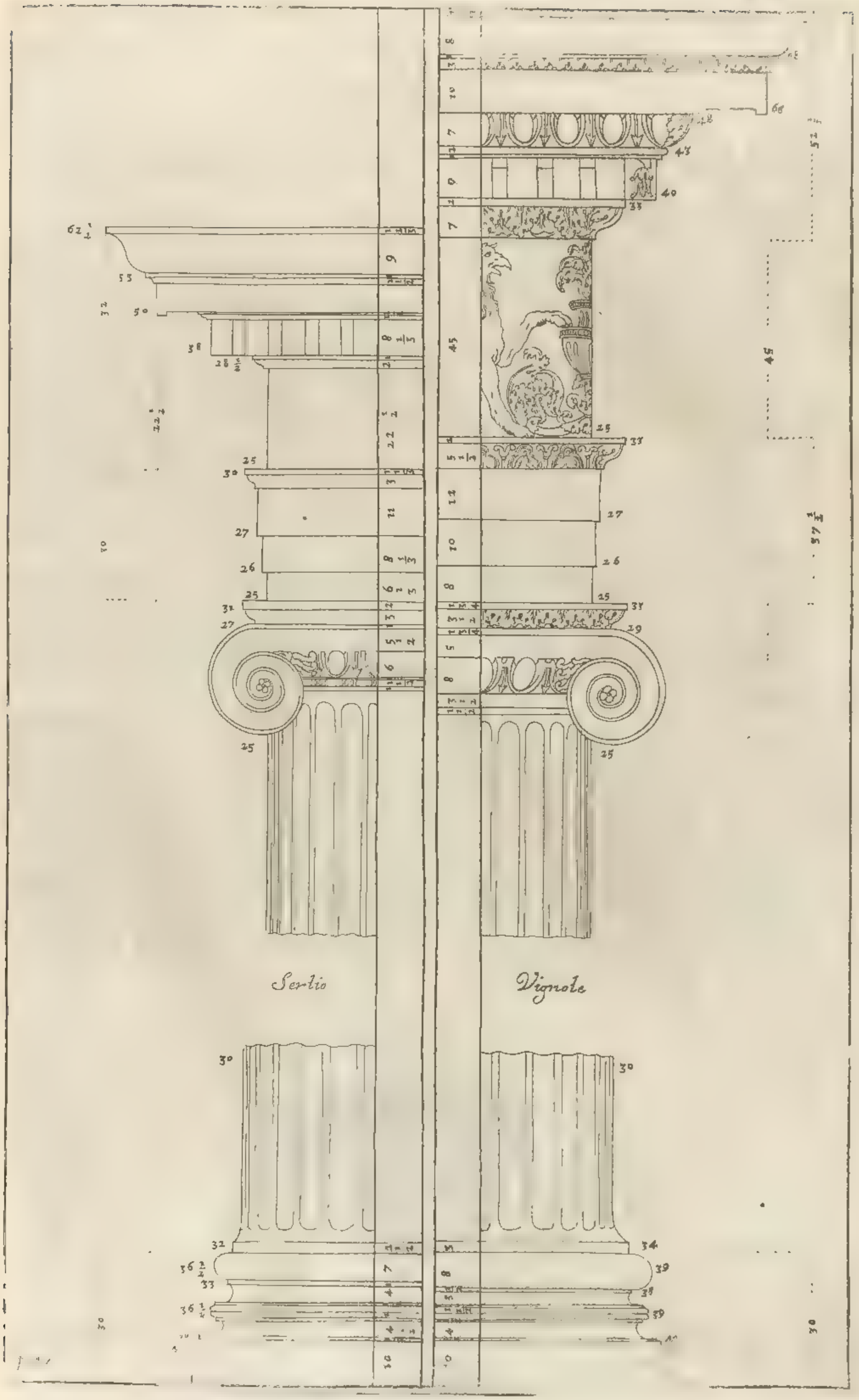
THE Inequality of these two *Profiles* is so wide, that 'tis almost impossible to approve of them both; and yet nevertheless there is in a manner as little reason to condemn either the one or the other, each of them having their Principles sufficiently regular, together with their Authorities and Examples.

The first, which is *Serlio*, having made a handsome *Collection* of all the most considerable *Antiquities* of *Italy*, from whence he should have taken a noble *Idea* of the *Orders*, is return'd back to the *School* of *Vitruvius*, whither the tenderness of his *Genius* has recall'd him.

On the contrary, *Vignola* is fallen with Excess into the other manner that we may name the *Grand*, which though indeed more noble and advantageous, has yet for all that its just Limits, which being once exceeded, become vicious and extravagant.

Now the great Difference of these two *Masters* proceeds from *Serlio*'s making his *Column* but of seven *Diameters* and a half, allowing only a fifth part to the *Entablature*; and *Vignola*'s composing his of nine *Diameters*, and his *Entablature* of a full Quarter.

That which I chiefly reprove in this last, is, that he makes use of the *Base* which *Vitruvius* compos'd for his *Ionick*; a thing not to be excus'd but in those who follow him likewise in all the rest: For others who have endeavoured to imitate the *Antique*, have no Reason to employ it, there being no Precedent for it: And in truth also, it never has had the Approbation of the ablest *Modern Masters*, who, upon Examination, have greatly wondered that *Vitruvius* should impose so vast a *Torus* upon so small *Cinctures*, charging the strong upon the weaker; which being totally repugnant to the Order of *Nature*, is very offensive to the Eyes of the Curious.


Sestio
Vignole

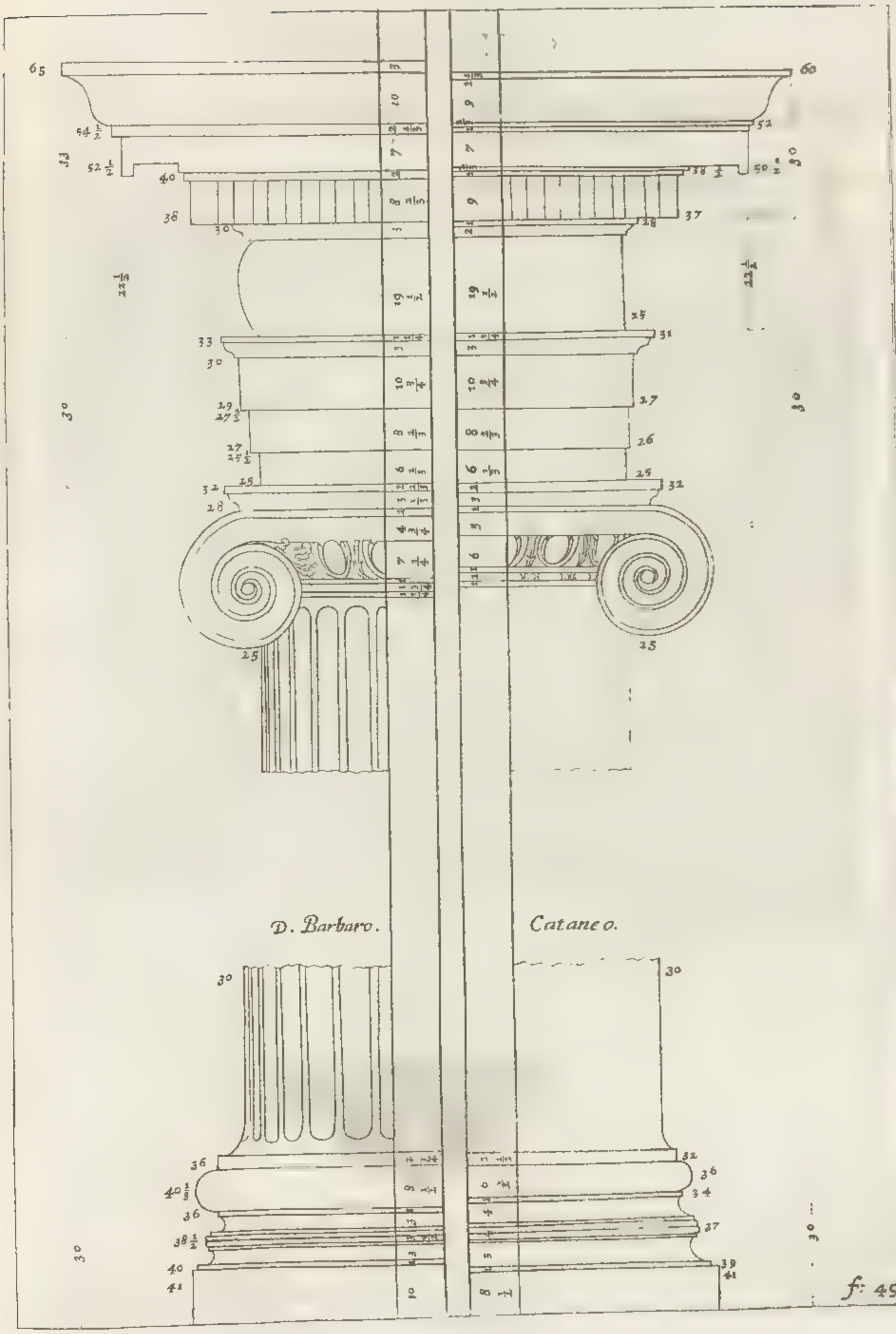
CHAP. XIX.

D. Barbaro *and* P. Cataneo *upon the* IONICK Order.

YOU have here the very ſame Style that *Serlio* has obſerved in the precedent *Chapter:* And though there be much reſemblance in the *Profiles* of all the three *Maſters*, nevertheleſs we muſt reckon that as to the Meaning of *Vitruvius* (to whoſe *Doctrine* they have univerſally endeavour'd to conform themſelves) *Daniel Barbaro* is the Captain and chief Conductor, as may be eaſily diſcern'd from the Pattern of the *Contours* only, belonging to the *Voluta* of the *Capitel*, which is a moſt eſſential Piece in this *Order*, and whoſe Draught was never ſo much as known to our modern *Architects* before, to whom we are obliged for the recovery of this excellent Maſter-piece of *Antient Architecture*, though he has had the Goodneſs to divide the Glory of it with his Contemporary and intimate Friend *Palladio*, by whoſe Conference and Help, he acknowledges to have been aſſiſted in the Delineation of all his Deſigns.

I reſerve it for the Concluſion of the *Ionick Order*, to make a Page apart of this manner of *Voluta*, where I ſhall ſhew a way to trace it regularly, according to our *Author*'s intention. And ſince it is more compendious to paint than deſcribe it, I ſhall better give you the Demonſtration by *Rule* and *Compaß*, than by employing a tedious Diſcourſe about it.

I find nothing obſervable in theſe two *Profiles*, beſides a certain Over-ſimplicity and Plainneſs: For the reſt, the Difference of the *Entablature*, as well in relation to the Height, as Shape, is ſo ſmall, that it is nothing at all conſiderable: What is more worthy of remark in the Deſign of *Daniel Barbaro*, is this; that he gives to every Face of the *Architrave*, a certain *Slope*, or kind of downward and inclining Stroke, as 'tis expreſly ordained in *Vitruvius*'s Third Book, towards the Period of the laſt *Chapter*. But I find that the Rule of *Perſpective*, upon which he grounds it, is more refin'd and ſubtile for its Diſcourſe, than any way ſolid in the Execution; and beſides, I never ſaw any Example of it in any Work whatſoever.



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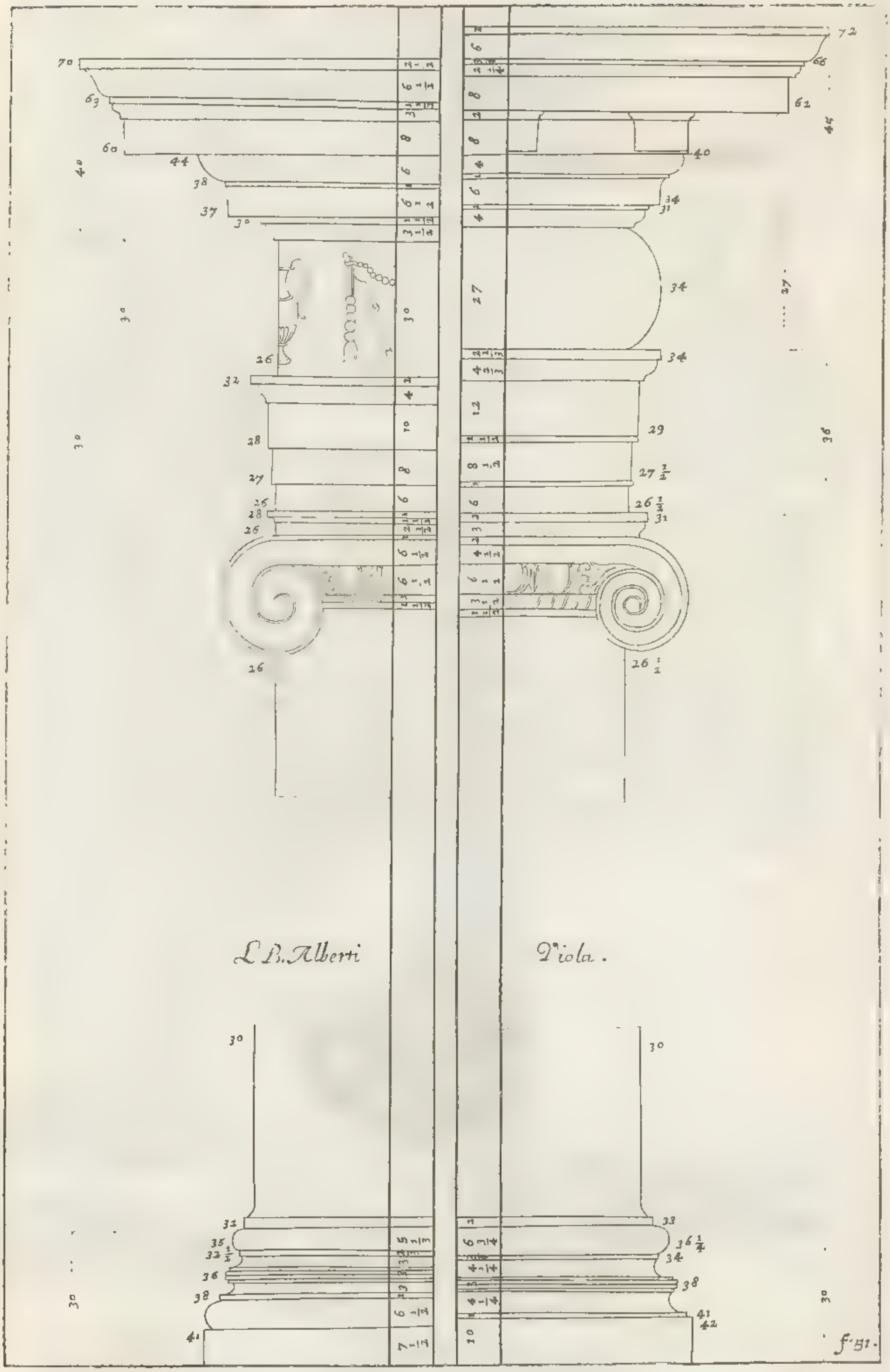
CHAP. XX.

L. B. Alberti, *and* Viola, *upon the* IONICK Order.

THE Conformity of theſe two *Deſigns* to thoſe of *Andrea Palladio* and *Scamozzi*, is ſo conſpicuous, that one may eaſily judge of their mutual Aſſiſtance of each other: *viz.* That *Viola* made bold with that of *Palladio*, as he did before in the *Dorick*: And that *Scamozzi* has imitated *L. B. Alberti*, who is his Senior above an hundred Years. For the reſt, it were a difficult thing to decide which of theſe two *Profiles* is to be preferr'd, in regard the *Ionick Order* has been ſo diverſly treated of by the *Antients*, as may appear in the Examples I have produc'd, of which there are ſome enrich'd with *Mouldings* and *Ornaments*, others more naked and ſimple. That which I ſhou d have wiſh'd for here, as conducing to a greater and more exact Regularity, ſhould have been to have cut the *Dentelli* upon the flat *Band* of *L. B. Alberti*'s Deſign, ſince he has omitted *Modilions* there, which his Companion *Viola*, for obſerving, may be the better excus'd of: Though for my part, I ſhould have rather employed *Dentelli* there, as an Ornament more particularly affected to the *Ionick Order*, and have reſerved the *Modilions* for the *Order* which follows next.

The Reader may remember, or elſe, looking back on ſome Pages, reflect upon what I have there obſerved on the *Profiles* of *Palladio* and *Scamozzi*; becauſe it ſo much agrees with that of *Viola* here; to which I may yet ſuperadd, as a new Charge, that he has done ill to imploy another *Baſe* different from that of the *Anttick*, ſince he ſaw how his Maſter *Palladio* had preferr'd it before that of *Vitruvius*'s Compoſition: He had alſo done much better to have follow'd preciſely the *Proportions* of the *Cornice* in the ſame Deſign of *Palladio*; for in attempting to diſguiſe his imitation, by adding of ſome *Members*, and changing of *others*, he has, in fine, render'd it but the more mean and trifling.


L B. Alberti
Viola.
f. 51.

CHAP. XXI.

Bulliant *and* de Lorme, *upon the* IONICK Order.

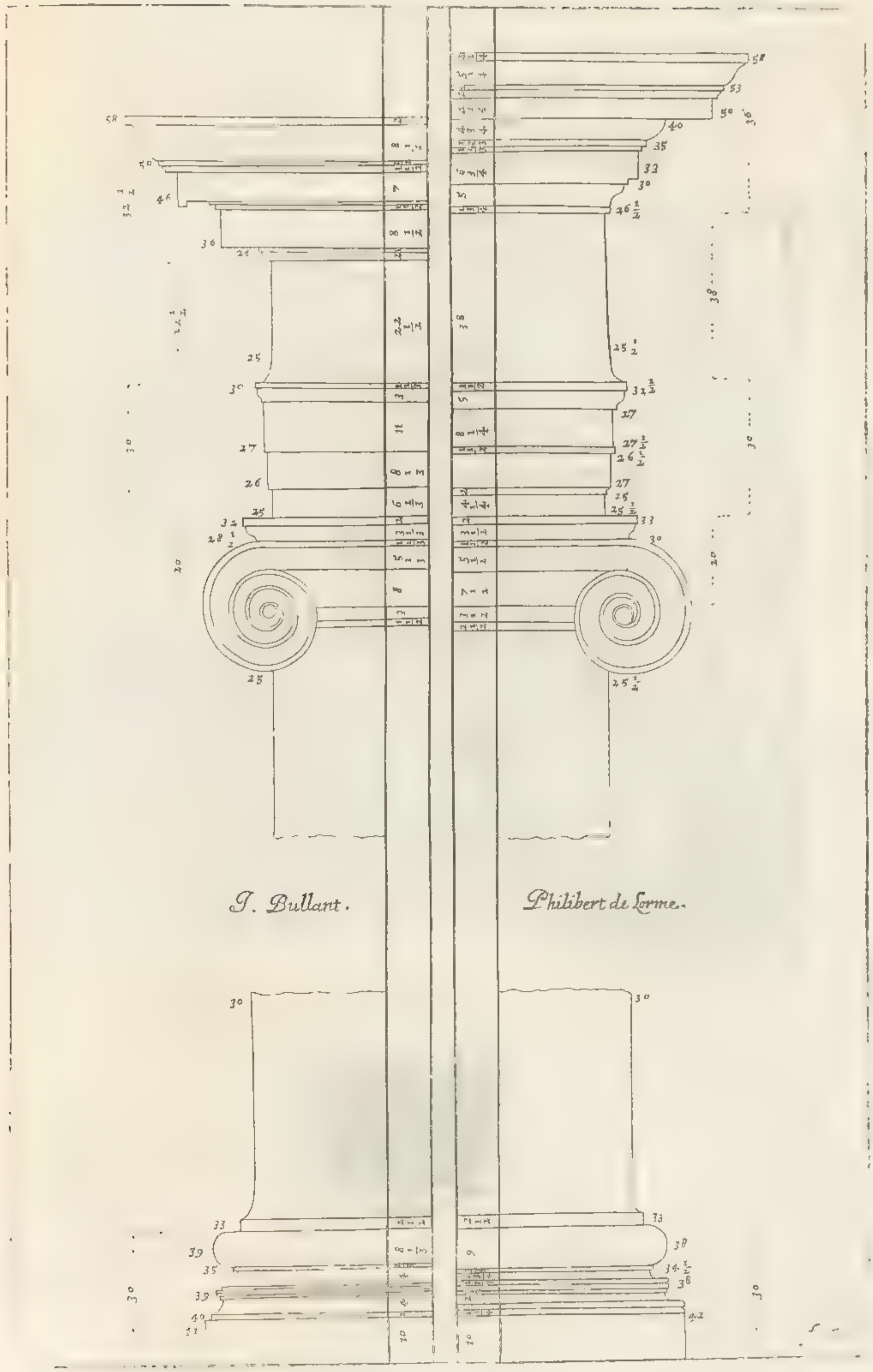
THIS firſt *Profile* is exactly after *Vitruvius*, as well as that of *Serlio*, *Cataneo*, and *Daniel Barbaro*, which you have already ſeen: But there is in the other nothing at all worthy of our Imitation, as being neither conformable to any of the *Antiques*, nor to *Vitruvius*, nor in the leaſt regular in its Parts: For firſt, the *Cornice* is *camuſe* and blunt, the principal *Members*, *viz.* the *Cymatium* and *Coping* ſmall and poor; the *Freeze* is larger than the *Cornice*, and the *Baſe* of the *Column* changed both in Shape, and the Proportion of its Parts, as appears by the exceſſive Dimenſions of the *Tore*, compared with the two *Scotia's* underneath; beſides that extravagant Repetition of the two *Aſtragals* upon the *Plinth*. The *Voluta* of the *Capitel* is alſo too groſs, and ſo is the *Collar* of the *Pillar* together with its *Liſt*: In a Word, the entire *Compoſition* is deſervedly ranged in this Place. But after all this, I cannot but admire, that a Perſon of this *Author*'s Condition, who was ſo extremely induſtrious (as may be eaſily deduced from what himſelf has publiſhed in his Book of Obſervations made at *Rome* upon the *Antiquities* there) who had ſo great a natural Propenſity to *Architecture*, and ſo many Opportunities of ſtudying at his Eaſe, and of inſtructing himſelf; who proceeded by ſo direct a *Method* of the *Art*, and in fine, was Maſter of ſo many handſome Occaſions of putting his Studies into Practice; that, I ſay, a Man furniſhed with ſo many Advantages, ſhould nevertheleſs immerge ſo ordinary an *Artiſt*. But this ſhews us, that we are many times deceived by our own *Genius*, and carried to Things for which we have no manner of Talent.

f: 55.

CHAP. XXIII.

Of the PERSIAN Order.

THOUGH the Name of this *Order* be leſs known than that of the *Caryatides*, under which it ſeems they would generally expreſs all thoſe *Orders* where *Figures* are introduc'd to ſupply the Places of *Columns*; yet ought we not to follow the vulgar Abuſe, ſeeing *Vitruvius* has put a Difference betwixt 'em in the ſame *Chapter*, where he ſpeaks of the *Caryatides*: And in regard *this* here ſhou'd be ſomewhat more Solid, in reference to the Sex, they ordinarily give him a *Dorick Entablature*, in Conſideration whereof I had once intended to have rang'd it at the End of the *Dorick Order*, or plac'd him the firſt here: but conſidering, ſince that *Vitruvius* does not treat of it till after the *Caryatides*, I thought it became me not to innovate any thing in a matter of ſo ſmall Importance. I ſhall therefore ſatisfie my ſelf in advertiſing, that the *Romans* very rarely made uſe of the *Caryatides*; and truly we do not meet with ſo much as any *Veſtiga* of them, though *Pliny* in his Thirty-fifth *Book*, and fifth *Chapter*, has mention'd thoſe of the *Rotunda*, to the amuſing of ſo many of our Modern *Antiquaries*, who, through all that *Temple* (and which to this Day remains ſo entire) can by no Diligence find any commodious Place nor Appearance where they ſhould have been well deſign'd: On the contrary, for theſe *Captives*, after the *Perſian*, there are extant ſundry Examples; ſome whereof are yet to be ſeen in the very Places where they were ſet in Work, as particularly in the *Arch* of *Conſtantine*, and ſome others, which have been tranſported into *Gardens* and private *Palaces*, which were taken no Body knows from whence. What is here deſign'd is from an excellent *Original*, extant yet at *Rome* in the Palace of *Farnezi*.


J. Bullant.
Philibert de Lorme.

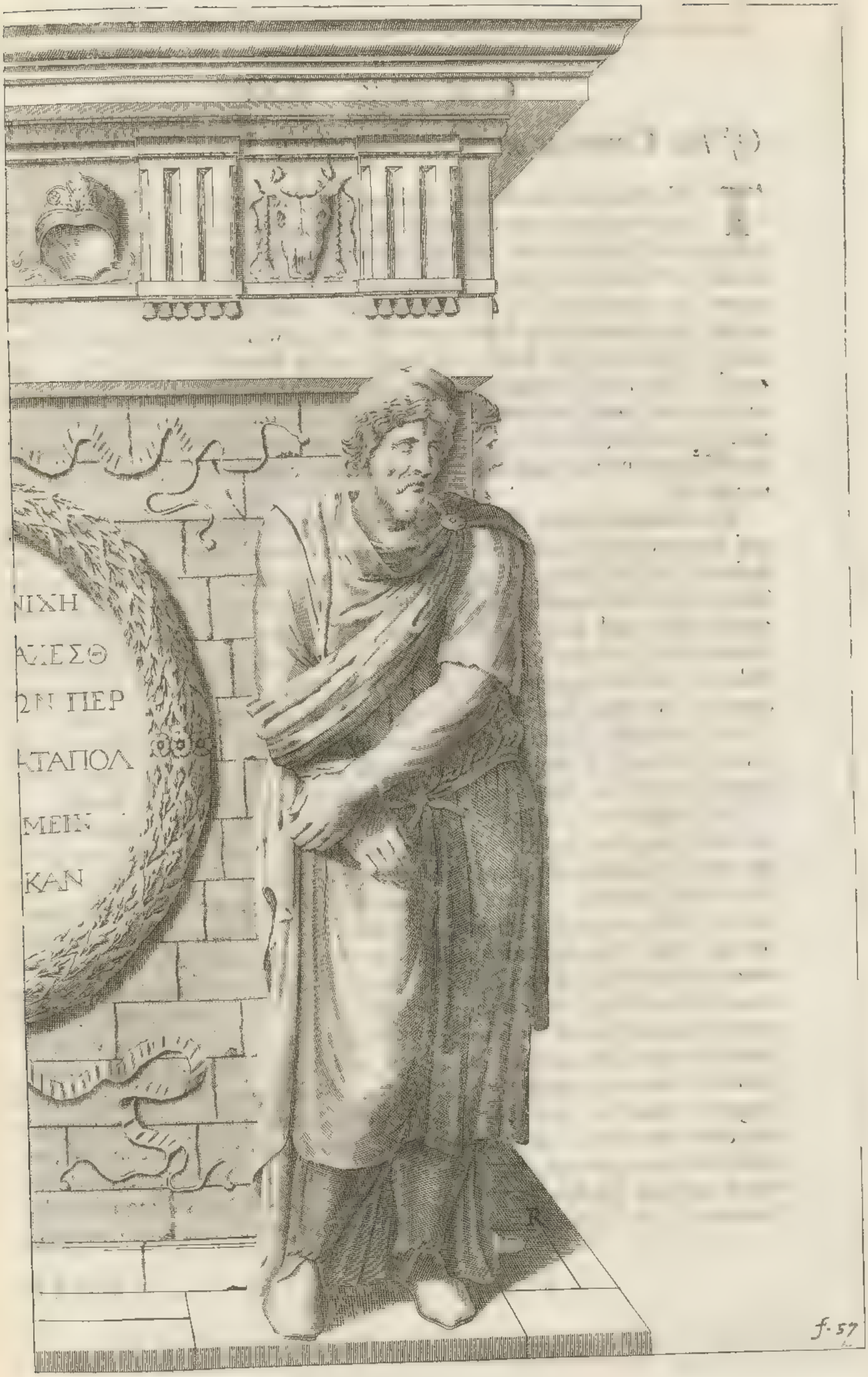
CHAP. XXII.

The Order *of the* CARYATIDES.

I Intend not here to repeat the *Hiſtory* from whence this *Order* has deriv'd its *Original*, having already ſo amply deduced it in the general Chapter of the *Ionick Order*, whereof this is here but a *Species*; all the Difference conſiſting in the ſole Alteration of the *Column*, metamorphos'd into the Figure of a *Woman*, which for appearing ſometimes incommodious to *Architects* from the extreme over-largeneſs of the Veſts and Garments cumbring and diſordering the Paſſage and *Symmetry* of the *Intercolumniation*, cauſed them to reduce it only to the carving of *Heads* in place of the *Capitels* where they adjuſted and compoſed the *Dreſſing* and *Tyre* to the Reſemblance of *Voluta*s, without any Alteration in the reſt of the *Column*, unleſs where they cut *Channels* or *Flutings* on it, to repreſent after a Sort the *Plaitings* and Folds of thoſe *Matron*'s Garments; ſince this Ornament is found to change neither the *Diameter* nor Height of the *Shaft*, which are the *Baſes*, and as it were, Foundations of *Architectonical* Proportions.

That which I aſſerted before concerning the *Caryatides* in the general Chapter of the *Ionick Order*, ſufficiently diſcovers how few the Occaſions are where they can be employed judiciouſly; notwithſtanding ſo many of our modern *Architects* take ſo great a Liberty of introducing them indifferently into all ſorts of Works: For not only the *Palaces* of great *Princes* without and within, but even the *Houſes* of private *Perſons*, *Churches* and *Sepulchres* themſelves are filled with them, without any regard either to the *Reaſon* of the *Hiſtory*, or to juſt *Decorum:* Nay oftentimes, out of an inſupportable Extravagance, in Lieu of theſe poor and miſerable *Captives*, they ſet the venerable Figures of the *Vertues*, *Muſes*, *Graces*, and *Angels* themſelves; whereas they ſhould in Truth rather chain and confine the *Vices* there.

But it is ſufficient to have advertiſed you of this Abuſe, without any further declaiming againſt it.


NIXH
ΛΙΕΣΘ
2Ν ΠΕΡ
ΚΤΑΠΟΛ
ΜΕΙΝ
ΚΑΝ
f. 57

CHAP. XXIV.

Of the Contour *or* Turning *of the* Ionick Voluta.

THE Body of this *Capitel*, without its *Voluta* or Scroul, bears a great Conformity to that of the *Dorick*, as may be eaſily diſcern'd by conferring their *Profiles* the one with the other: For the Diverſity of their Form, which at firſt bluſh appears ſo large to the Eyes of ſuch as have never examined the Particulars of the *Members* that compoſe it, conſiſts altogether in the Application of the *Voluta* upon the *Abacus*, which gives a moſt advantageous Variety to the *Ionick*; inaſmuch as the Draught of its *Contour* does conſiſt of the moſt induſtrious Operation of the *Compaſs* which is practiſed in the whole *Art* of *Architecture*; ſo as whoever of our modern *Maſters* he were that retriev'd it (for 'twas a long time loſt, and totally unknown to thoſe of the *Profeſſion*) he has render'd doubtleſs a very conſiderable Piece of Service to the Art.

That famous Painter *Salviati*, Contemporary with the *R. Daniel Barbaro*, and by conſequence alſo with *Palladio*, printed a ſmall looſe Sheet, which he dedicated to *D. Barbaro* as to the moſt famous *Arbiter* of *Architecture* in his Time, who alſo underſtood it, and had communicated it with *Palladio*, who accidentally, and as it were by chance, had been the firſt Inveſtigator of the Practice of it, whiles he met amongſt ſome ancient *Fragments* a *Capitel* of this *Order*, on whoſe imperfect and rough-hewn *Voluta* he obſerv'd the thirteen *Centers* of this *Spiral Line*, which gives ſo noble and ingenious a *Turn*.

I will not here engage myſelf on a tedious Diſcourſe about its Deſcription, it being ſo much a ſhorter and more demonſtrative way to advance to the direct *Method* of its *Delineation*: Thus then in general you are to proceed.

The Height of the *Chapter*, and Partition of each Member being deſign'd, one muſt regulate the Extent and Proportion of the *Abacus* conformable to the Meaſure decipher'd upon the *Profile* at the Point of 32, and at the Point 28½ a little beneath. Where the *Cymatium* encounters the *Liſt* of the *Scroul*, make a little perpendicular Line, ſo as it may paſs through the very *Center* of the *Eye* of this *Voluta* marked A, till falling upon a *Right Angle* by the Co-incidence of another Line proceeding from the middle of *Collerine* or *Chaplet*, the Point of *Interſection* give you the juſt *Center* of the *Eye*: Then about this *Center* deſcribing a *Circle* of the wideneſs of the *Collerine* (which *Circle*, as was ſaid, points the preciſe Dimenſions of the *Eye*, and its true place of Poſition) you ſhall form therein a ſmall *Square*, through whoſe *Angles*, having drawn two *Diagonals* (which cut into four *Triangles*) divide each moiety of the *Diagonals* into three equal Parts, and each of theſe Points ſhall ſerve for conſequetive *Centers* one after another, by which to form thoſe ſeveral Quarters of *Circles* which compoſe the *Spiral* Line of the *Voluta*. They are diſtinguiſhed by *Numbers* on the *Deſign*, according to the Order by which you are to proceed.

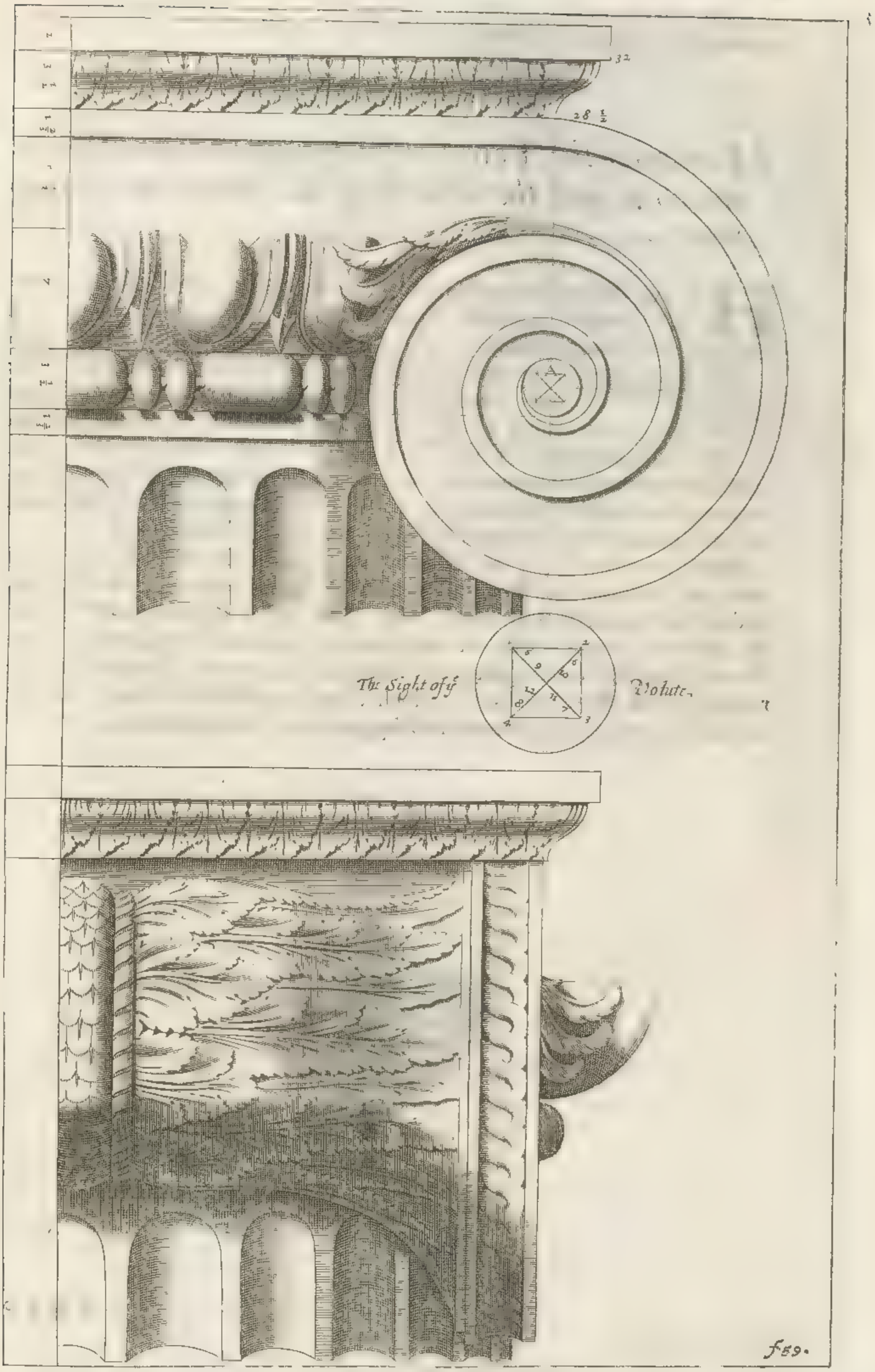


Fig. 9.

CHAP. XXV.

A Portico *of the* Temple *of* Fortuna Virilis *at* Rome, *which is now the* Church *of St.* Mary *the* Ægyptian

HAving throughly examined every Part of the *Ionick Order*, and observed in particular the Shape and Proportion of all its *Members:* It seems now in a manner necessary, the better to conceive a perfect *Idea* of them, to place them together in one intire Body, that so we may contemplate the *Symmetry* and Conformity which they hold mutually to each other: I have to this Effect, made choice of a *Frontispiece* the most noble and magnificent Composition an Edifice can possibly be adorn'd with: And to the end we may contain ourselves within the just Limits which I have established, I shall here make use of the same *Antiquity* from whence I extracted my first *Model*, whereon I do principally found the Regularity of the *Dorick Order*.

Those who shall have the Curiosity to examine the *Plan* of this *Temple*, with its Measures and *Profile* of the *Door*, which is exceeding noble, may find in the Fourth *Book* of *Palladio*, *Chap.* XIII. and at the same time see one of the most curious Pieces of *Architecture* of that whole *Book*, which is the *Plan* of a *Capitel* he calls *Angular*, that being plac'd upon the *Column* of an *Angle*, renders a Face of two Sides, by which it preserves the same Aspect with the rest of the *Capitels*, which are on the *Wings* and *Front* of the Structure.

CHAP. XXVI.

Of the CORINTHIAN Order.

THE higheſt Degree of Perfection to which *Architecture* did ever aſpire, was erected for it at *Corinth*, that moſt famous and formerly moſt opulent and flouriſhing *City* of *Greece*, although, at preſent, there hardly remains any Footſteps of the Grandure which render'd it even formidable to the People of *Rome* itſelf, but which was alſo the Cauſe of her Ruin: For this *Nation* impatient of Competitors, on pretence that the *Corinthians* had done ſome diſpleaſure to the *Ambaſſadors* which ſhe had ſent, took occaſion of denouncing War againſt her; ſo as the Conſul *Lucius Mummius* going thither with a great Army, reduc'd their *City* to Aſhes, and in one Day deſtroyed the Work of more than nine *Ages* from the Period of its firſt Foundation.

It was from thence that our *Corinthian Order* aſſum'd its Original; and although the Antiquity of it be not preciſely known, nor under whoſe Reign that *Callimachus* lived, to whom *Vitruvius* attributes the Glory of this excellent Production; it is yet eaſie to judge by the nobleneſs of its Ornament, that it was invented during the Magnificence and Splendor of *Corinth*, and not long after the *Ionick Order* to which it hath much reſemblance, the *Capitel* only excepted; for there's no mention that *Callimachus* added any thing of his own beſides that ſtately Member.

Vitruvius in the firſt *Chapter* of his Fourth *Book*, reports at large upon what occaſion this ingenious *Architect* form'd the *Idea* of this great Maſter-piece, which hath born away the Palm of all *Architecture*, and render'd the Name of *Corinth* immortal: And though the *Hiſtory* which he there mentions, may appear ſomewhat fabulous in the Opinion of *Villalpandus*, who treats alſo of this *Capitel* in his ſecond *Tome*, *Lib.* V. *Chap.* XXIII. nevertheleſs it were very unjuſt that the particular conceit of a *Modern* Writer ſhould prevail above the Authority of ſo grave an *Author*. Let us ſee then what *Vitruvius* ſays of it.

A *Virgin* of *Corinth* being now grown up, fell ſick and died: The Day after her Funeral, her *Nurſe* having put into a *Basket* certain ſmall Veſſels and Trifles with which ſhe was wont to divertiſe her ſelf whilſt ſhe lived, went out and ſet them upon her *Tomb*; and leaſt the Air and Weather ſhould do them any injury, ſhe cover'd them with a *Tyle*: Now the *Basket* being accidentally plac'd upon the Root of an *Acanthus*, or great *Dock*, the Herb beginning to ſprout at the Spring of the Year, and put forth Leaves, the Stalks thereof creeping up along the Sides of the *Basket*, and meeting with the Edge of the *Tyle* (which jetted out beyond the Margine of the *Basket*) were found (being a little more ponderous at the Extremes) to bend their Tops downwards, and form a pretty kind of natural *Voluta*. At this very time it was that the Sculptor *Callimachus* (who for the Delicateneſs of his Work upon Marble

Marble, and Genteelneſs of his Invention, was by the *Athenians* ſurnamed *Catatechnos*, that is to ſay, *Induſtrious*) paſſing near this Monument, began to caſt an Eye upon this *Basket*, and to conſider the pretty Tenderneſs of that ornamental *Foliage* which grew about it, the Manner and Form whereof ſo much pleaſed him for the Novelty, that he ſhortly after made *Columns* at *Corinth* reſembling this *Model*, and ordain'd its *Symmetries*, diſtributing afterwards in his Works Proportions agreeable to each of its other Members in Conformity to this *Corinthian* Mode.

You ſee what *Vitruvius*, reports: But *Villalpandus*, who will needs give this *Capitel* a more illuſtrious and antient Original, pretends that the *Corinthians* took it firſt from the Temple of *Solomon*, of which *God* himſelf had been the *Architect*; and the better to elude what *Vitruvius* but now taught us, would make us believe, that the *Capitels* of the *Acanthus* were rarely uſed by the *Antients*, who were wont ordinarily to carve them with *Olive-leaves*; and proves in that which follows by *Texts* out of the *Bible*, and ſome other *Hiſtorians* who have given us the Deſcription of this Divine *Architecture*, that the true Originals of the *Temple* were of *Palm* branches bearing *Fruit*, to which the Leaves of the *Olive* have a nearer Correſpondence. The *Deſign* which we ſhall hereafter deſcribe, with the whole *Entablature* of the Order, drawn preciſely according to the Meaſures which *Villalpandus* has collected, and which I expreſly follow'd, without regarding the *Profile* which he has cauſed to be Engraven, will better diſcover that I know not how to decry the Beauty of this Compoſition: In the mean time, to be conſtant and preſerve myſelf within the Terms of the *Corinthian Architecture*, which has been practiſed by thoſe great *Maſters* of Antiquity as well *Greeks* as *Romans*, and of whom there yet remain ſuch wonderful Foot-ſteps, and even entire *Temples*, which may ſerve as ſo many expreſs and demonſtrable Lectures of the Proportions of this *Order*: I have made choice of one of the moſt famous amongſt them, to which I totally conform myſelf, without any reſpect to the Opinion of the *modern* Authors; ſeeing they ought to have purſu'd the ſame Paths, and regulated themſelves with me upon theſe *Original* Examples.

The *Rotunda* (heretofore called the *Pantheon*) having ever obtained the univerſal Approbation of knowing Perſons, as being the moſt regular *Corinthian* Work, and indeed the moſt famous among all the Remainders of *Antient Rome*, appears to me to be the very beſt *Model* which I could poſſibly make choice of, though there are indeed others to be found which are much richer in Ornaments, and of a Beauty more elegant: But as our *Guſts* do generally differ, I have preferr'd mine own, which rather affects things *Solid* and a little *Plain*, for that indeed to me they appear fulleſt of Majeſty. Nevertheleſs, foraſmuch as 'tis neceſſary that an *Architect* accomode himſelf to the Perſons *Humour* which employs him; and for that one meets with Occaſions where Magnificence is proper, as in *Triumphal Arches*, *King's Palaces*, *Temples*, and publick *Baths*, which were much in uſe among the *Antients*, and in divers the like ample Structures, where Splendour and Profuſion are chiefly conſider'd. I will produce ſome Examples of the moſt renown'd of *Antiquity*, the firſt whereof ſhall be that great Relique of the *Frontiſpiece* of the *Torre di Nerone*, ſo call'd, which has been demoliſhed within

within theſe laſt thirty Years, to the great reproach of this Age, by the Avarice of ſome particular Perſons.

This was one of the rareſt Pieces of *Antiquity*, as well for the Beauty and Richneſs of its Ornaments, as for the Compoſures of the Members of the Order, which even in *Paper* itſelf appears bold and terrible; the judicious *Architect* of this Work very well underſtanding how to introduce a *Grandure* of *Manner* into his Deſign, which ſhould equal that Maſs of Stones he heap'd up and contriv'd into the Structure of this *Gigantick* Edifice, whereof the *Columns* contained ſix Foot Diameter.

It is not preciſely known was it who that cauſed it to be built, nor yet to what Purpoſe it ſerved: Some imagine it was a *Temple* erected by the *Emperor Aurelianus*, and Dedicated to the *Sun*. Others, that 'twas only a particular *Palace*. The Vulgar have a *Tradition*, that *Nero* rais'd it of that Height, to behold the *Conflagration* of *Rome*; which is very improbable, as being too great a Work to have been accompliſhed in ſo ſhort a time: But whatever it were, certain it is, that it has been the moſt magnificent and goodlieſt Order of *Corinthian* Work which all *Rome* could boaſt of, as one may well perceive by the Deſign which I ſhall preſent you of it after *that* of the *Profile* of the *Portico* belonging to the *Rotunda*, being the *Model* on which I regulate the *Proportions* of the *Corinthian*.

The enſuing *Deſign* is a ſimple Repreſentation of the *Hiſtory* of *Callimachus*, which I but now reported, and is placed here only for Ornament ſake.

CHAP. XXVII.

A CORINTHIAN Profile *taken from the* Portico *of the* Rotunda *at* ROME.

THE whole Height of the *Order* from the *Base* to the *Cornice*, amounts to three and twenty *Modules* and two thirds; whereof the *Column* with its *Base* and *Chapter*, contains nineteen, and the *Entablature* four and two thirds: so as the whole *Entablature* (which is the *Architrave*, *Freeze* and *Cornice*) makes a quarter of the *Column*. And albeit it may seem reasonable to follow the Opinion of some *Authors*, who allow it but a fifth; yet we find, that the most famous of the *Antique*, for Example, this Frontispiece of *Nero*, and the three Pillars of *Campo Vaccino* at *Rome*, which in the judgment of *Architects* pass for the noblest Reliques of *Antiquity*, challenge an entire fourth part for their *Entablature*. Upon this Account, I conceive it safest to preserve our selves within the Limits of our Example from the *Rotunda*, lest endeavouring to render this *Order* more spruce and finical, it become in fine but the more contemptible.

Behold here its Composition in general, and the Proportions of the principal Members, of which the *Module* is ever the *Semediameter* of the *Column*, divided into thirty *Minutes*.

The entire Height of the *Order* contains twenty three *Modules* and two thirds, which amount in *Minutes* to ——— 710

The *Base* has one *Module* precisely ——— 30

The *Shaft* of the *Column* fifteen *Modules* and two thirds, wanting two *Minutes* ——— 468

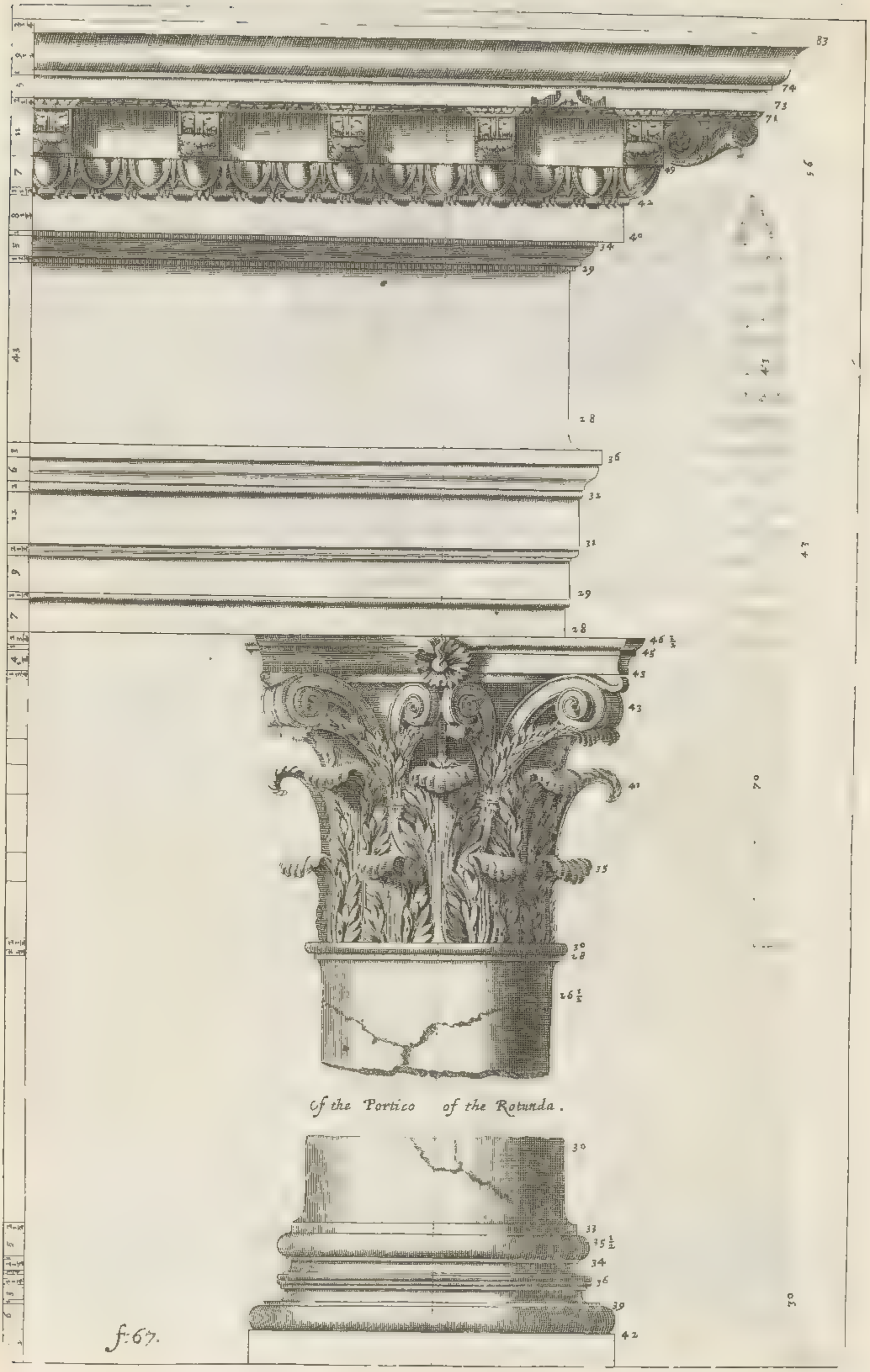
The *Chapter* contains two *Modules* and a third only ——— 70

The *Entablature*, viz. *Architrave*, *Freeze* and *Cornice*, four *Modules* and two thirds, two *Minutes* over ——— 142

Concerning the small Divisions of each part, it would be too tedious and indeed superfluous to specify them here, since the Design demonstrates them more intelligibly.

I have towards the End of the Second *Chapter* of this *Book*, taught how one should make the *Calculation* of an *Order* for the examining the Proportion which the *Entablature* bears with its *Column*, and thereby to see if it hold regular: It would be no loss of time to the Reader, did he make proof of his Skill upon every *Profile*. But I advise him before hand, that there are three different Proportions, all of them beautiful, and which may very well agree with this *Corinthian Order*: That is to say, the *Fourth*, as in this and the following *Profile*: The two *Ninths*, which are the mean Proportions of the *fourth* to the *fifth*, as in the third *Profile* taken from the *Baths* of *Diocletian*: And lastly, the *fifth*, as in the *Profiles* of *Palladio* and *Scamozzi*, not so frequently encounter'd among the *Antients*.

CHAP.



Of the Portico of the Rotunda.

CHAP. XXVIII.

The Elevation in Perſpective *of an excellent* Corinthian Profile, *which was in the* Frontiſpiece *of the* Torre di Nerone *at* Rome.

ALthough this Piece of *Architecture* were one of the moſt Magnificent of all *Antiquity*, as well for the Excellency and Richneſs of its Ornaments, as for the Stupendouſneſs of the Work; yet could I never certainly learn what kind of Structure this ſhould have been, nor indeed under whoſe Reign it was built: Some reporting it to have been a *Temple* dedicated to the *Sun* by the Emperor *Aurelian*: Others, that it was only a private *Palace* built by *Nero*, in which he plac'd that extravagant *Coloſs* of *Braſs*, which fixt a *non ultra* to the Folly of the *Sculptors* of that *Age*, who out of a ſacrilegious Profanation of their Art, would *Deify* the *Emperors*, by erecting *Statues* to them of a prodigious Grandure, as they did heretofore to the *Gods* to whom this Honour was of right to be reſerv'd. *Andrea Palladio* conceiv'd it to have been a *Temple* of *Jupuer*; ſome others conjectur'd that it might be a *Palace* of the *Cornelii*; thus every one had his particular Conceit: But ſince the truth of this Queſtion is very indifferent to our *Subject* in hand, which conſiders only what relates to *Architecture*, I ſhall reſign the Debate thereof to our *Antiquaries*.

The *Columns* were ten *Diameters* in Height, every *Diameter* of ſix Foot, which being of ſo exceſſive a bigneſs, as tranſcended whatſoever had been built at *Rome* either before or ſince, it inclines me to believe it might indeed be ſome Work of *Nero*'s. The Compoſition of the *Profile* in general is of an excellent *Idea*, and each Member ſufficiently regular: For the reſt, I thought fit to preſent it in *Perſpective*, to ſhew the ſtupendous effect of this manner of *Deſign*, which even upon *Paper* itſelf, and without at all exceeding the Limits and Proportions which the *Art* has preſcrib'd, preſents to the Eye a kind of aſtoniſhing *Grandure*, proceeding partly from the extraordinary Projecture of the *Entablature*, whoſe *Corona* carries its *Jette* a great way beyond the *Modilions*, and which indeed makes the *Columns* to appear a little weak and ſurcharg'd: But the *Architects* had provided judiciouſly for it, by making uſe of that manner of *Columnation* which the *Greeks* have termed *Pycnoſtylos*, where the *Pillars* are ſet very near to one another.

Now for thoſe who have only made their Studies of *Architecture* but from ſimple *Profiles*, may wonder to ſee here ſome of the Members extraordinarily diſtant from their accuſtom'd Proportion; I advertiſe them that it proceeds from an effect of the *Opticks*, which never preſents things preciſely to the Eye, but diverſifies them according to the various Aſpects and Diſtances from whence they are beheld; and the parts which thence receive a more ſenſible alteration, are ſuch of them whoſe *Superficies* is moſt *Flexuous* and *Circulary*, as the *Gula*, or *Ogee*, which compoſes the *Crown* of the *Cornice*, which being ſeen from beneath, and more advanc'd upon the *Plan*, receives a conſiderable acceſs of Height. The ſame reaſon alſo makes the *Column* to diminiſh, as being ſet further within the *Plan* than any of the reſt of the Members.

a Scale of three Modells for this Profile.
The Frontispice of Neron.

f. 69.

CHAP. XXXIX.

Another CORINTHIAN Profile *exceedingly enrich'd and full of Ornament, taken from* Diocletian's Baths *at* ROME.

AFTER this *Corinthian* Example, we are no more to expect any thing rich in *Architecture*, but it belongs to the Judicious only to put it in practice; for the abundance of *Ornaments* is not always to be esteemed, nor of advantage to a Building: On the contrary, unless the *Subject* oblige one to it by Consideration very powerful, one should never be too profuse, since they but disturb the Proportions, and produce a Confusion among the *Parts*, which offends the Eyes of those who are truly knowing, and carries a certain antipathy to the very name of Order.

It is not therefore to be employed but in great and publick Works, Houses of *Princes*, and such *Palaces* that are built for magnificence only; as were heretofore at *Rome* the *Baths* of *Diocletian*, of *Antonius*, and *Trajan*, whereof there are yet to be seen such goodly remainders, and from whence this *Profile* had been taken notice of and design'd by that famous *Architect*, *Pyrrho Ligorio*, in the Year 1574. since which time these great *Theatres* of *Architecture* have been dismantled of sundry of their *Columns* with their Ornaments, and of a number of other incomparable pieces, whose *Designs* I have from the hand of several *Masters*, who had there made very curious and profitable Observations, from many noble things, which are now no more to be found.

The *Diameter* of the *Columns* of this *Profile*, amounted to four *Palms*: The *Chapter* had this in particular, that its *Stalks* and *Flexures* of the Leaves, were made in the Form of *Rams Horns*, but the rest after the ordinary Proportions and *Foliage*. In sum, the whole Ornament in general was so artificially elaborated, and finish'd with that affection and politeness, that *Pyrrho Ligorio* having accomplish'd the Design, writ this underneath it, That by the Delicateness of the Work, one would believe the *Sculptors* had wrought with their *Tools perfum'd*.

The Proportions of the Order.

The *Column*, together with its *Base* and *Chapter*, has twenty *Modules*, which reduc'd to *Minutes* (thirty whereof make a *Module*) amounts to —— 600
The *Architrave* hath a *Module* and a Third —— 40
The *Freeze*, in like manner, one *Module* and a Third —— 40
The *Cornice* two *Modules* within eight *Minutes* —— 52
The whole *Entablature* amounts to two ninths of the Height of the *Column*, which is a noble Proportion, and shews handsomely in Work.

CHAP.

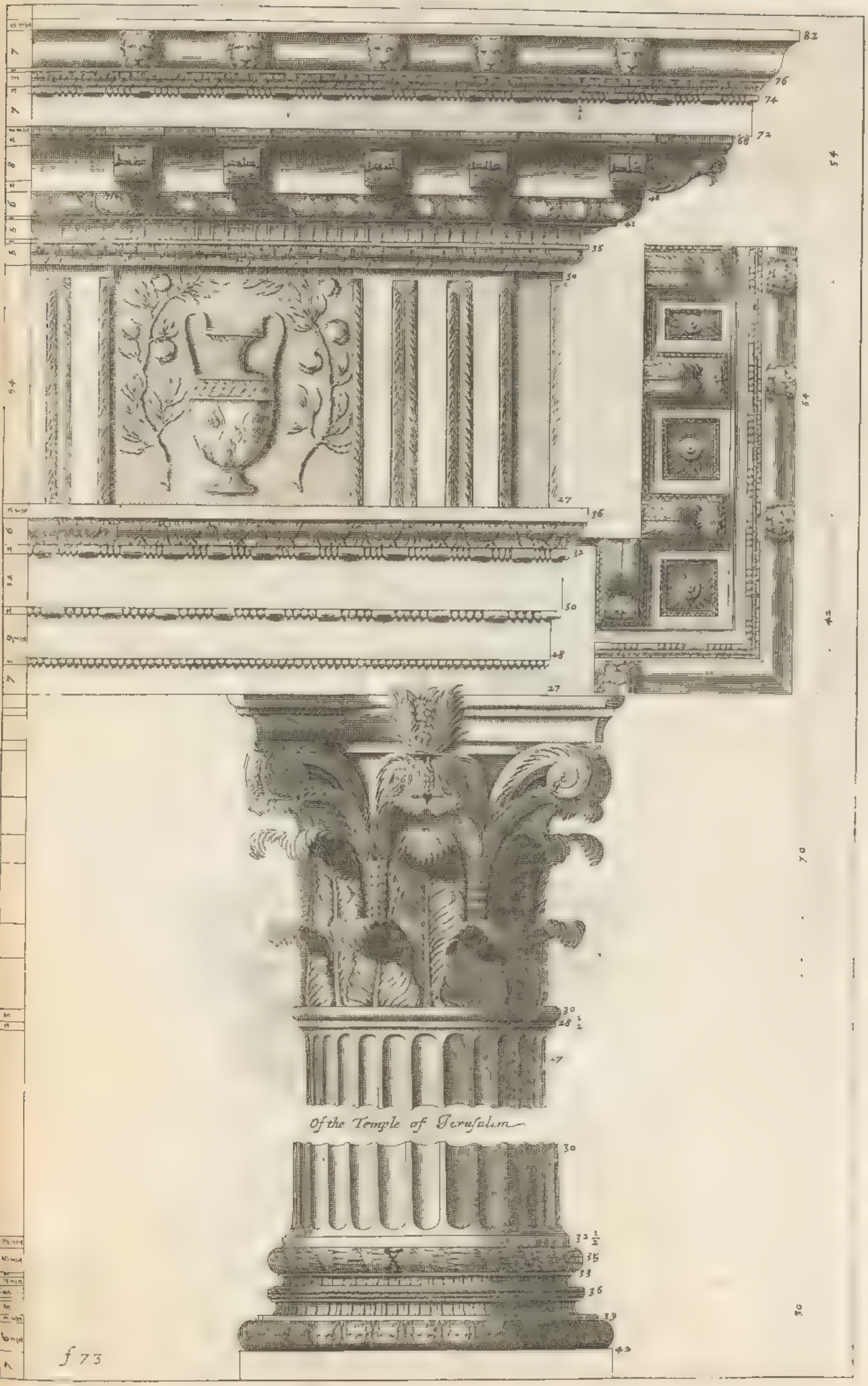
Of the Bathes of Diocletian

f 71

CHAP. XXX.

A CORINTHIAN Profile *of the* Temple *of* Solomon, *out of* Villalpandus.

BEhold here a kind of particular *Order*, but of an excellent *Compoſition*, which though I dare not affirm to have been preciſely the ſame *Profile* with that of *Solomon's Temple* (the *Model* which I propoſe to my ſelf) yet as near as one can approach to that divine *Idea* from its Deſcription in the *Bible*, and ſome other famous *Hiſtories* mention'd in that great Work of *Villalpandus*, where all the Ornaments and principal Proportions of each Member are exactly ſpecified, I conceive it to be ſufficiently conformable. The Compoſition is perfectly *Corinthian*, though the *Foliage* of the *Capitel* and its *Cauliculi*, or Branches, are of *Palmes*, and the *Freeze* of the *Entablature* has borrow'd the *Dorick* Ornament, which are the *Tryglyphs*, whoſe Solidity bears but little Conformity with the Tenderneſs of the *Corinthian*. But by what ever name you will call this *Order* (notwithſtanding that *Joſephus* affirms it to have been the *Corinthian*) certain it is, there was never any more perfect: And although the *Corinthian* be a very ſoft and *maidenly Order*, which does not require the Strength and *Virility* of the *Doruck*, ſymboliz'd by the *Tryglyphs*; yet may one, upon certain Occaſions, introduce it with that addreſs and reaſon, as will not only render it excuſable, but very judicious. For inſtance, ſuppoſe one were to build *Churches* or *Altars* in memory of thoſe generous *Virgins*, who from their tender Age vanquiſh d the Cruelty of *Tyrants* for the Defence of *Chriſtianity*; ſurmounting all Sorts of Torments by their Conſtancy: What could we imagine more expreſſive and ſuitable to their Courage than this Divine *Order*? It may alſo be proper on ſome profane Occaſions, as in *Triumphal Arches* and the like Structures. In a Word, ſince it gave *Ornament* to that famous *Temple* of *Jeruſalem*, which never yet had equal, we may with reaſon call it the *Flower* of *Architecture*, and the *Order of Orders*.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Of the Temple of Jerusalem
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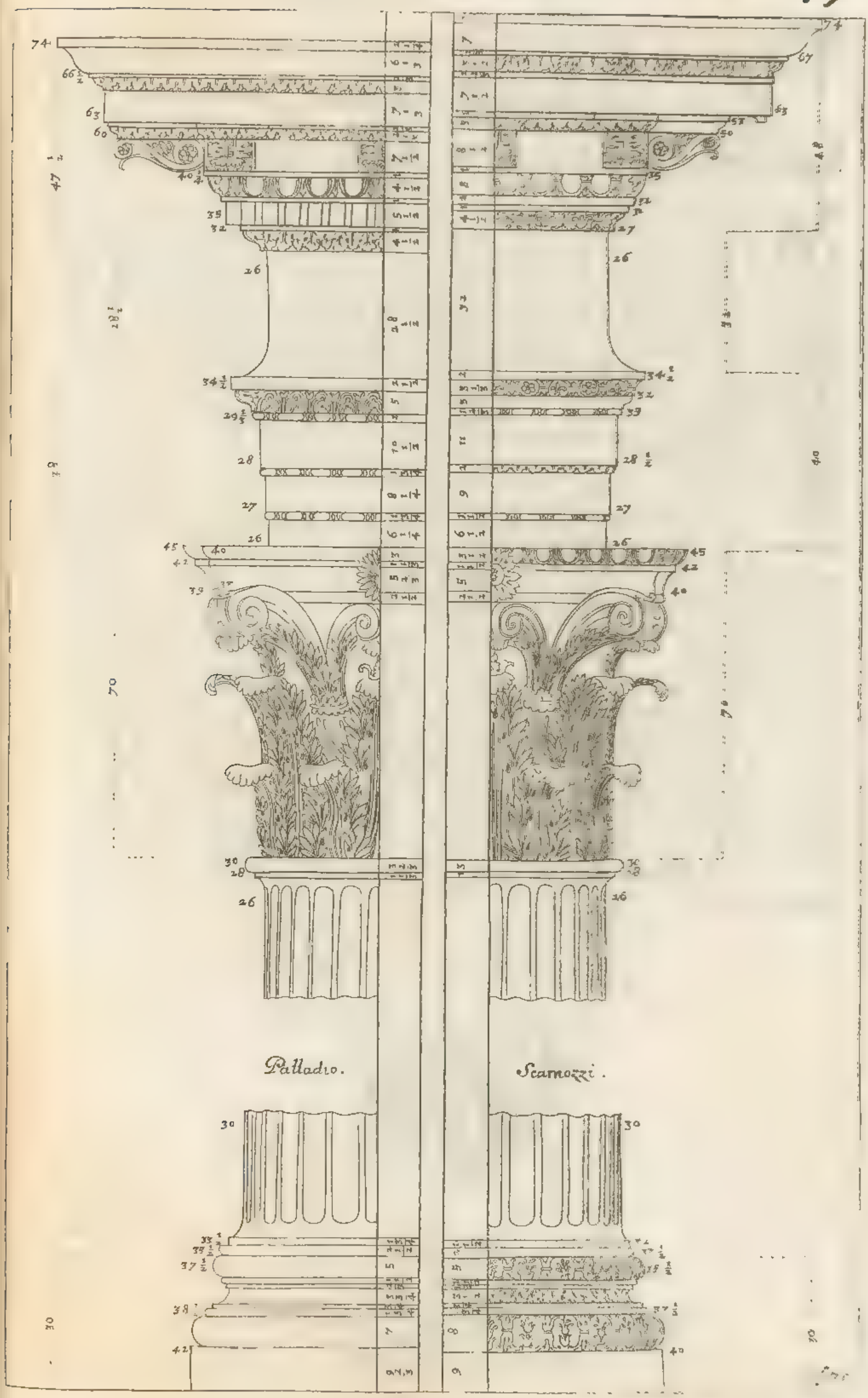
f 73

CHAP. XXXI.

Palladio *and* Scamozzi *upon the* CORINTHIAN Order.

OF all the *Corinthian* Examples which I have formerly produc'd for the *Rule* of the *Order* expreſly choſen from the moſt excellent Pieces of *Antiquity*, there is not one of them of the Proportion which theſe two *Maſters* here obſerve, who make their *Entablature* but a fifth part of the *Column*. However when I conſider their great Reputation (particularly that of *Palladio*, whoſe Works even emulate the beſt of the *Antients*) and the Reaſons which they alledge for diſcharging the *Columns* proportionably as they are weaken'd by the Altitude and *Diminution* of their *Shaft*, according to the Delicateneſs of the *Orders*, I can neither contradict their Judgment, nor blame thoſe who would imitate them; though my own *Maxim* be ever preciſely to conform myſelf to the *Guſto* of the *Antients*, and to the *Proportions* which they have eſtabliſh'd.

Palladio makes his *Column* but of nine *Diameters* and a half; that is to ſay, of nineteen *Modules*; ſo as the difference of the Height obſerv'd betwixt his *Entablature* and that of *Scamozzi*'s, proceeds from *Scamozzi*'s Columns being of ten *Diameters*, which is likewiſe an excellent *Proportion*, and indeed more uſual than the other among the *Antients*.

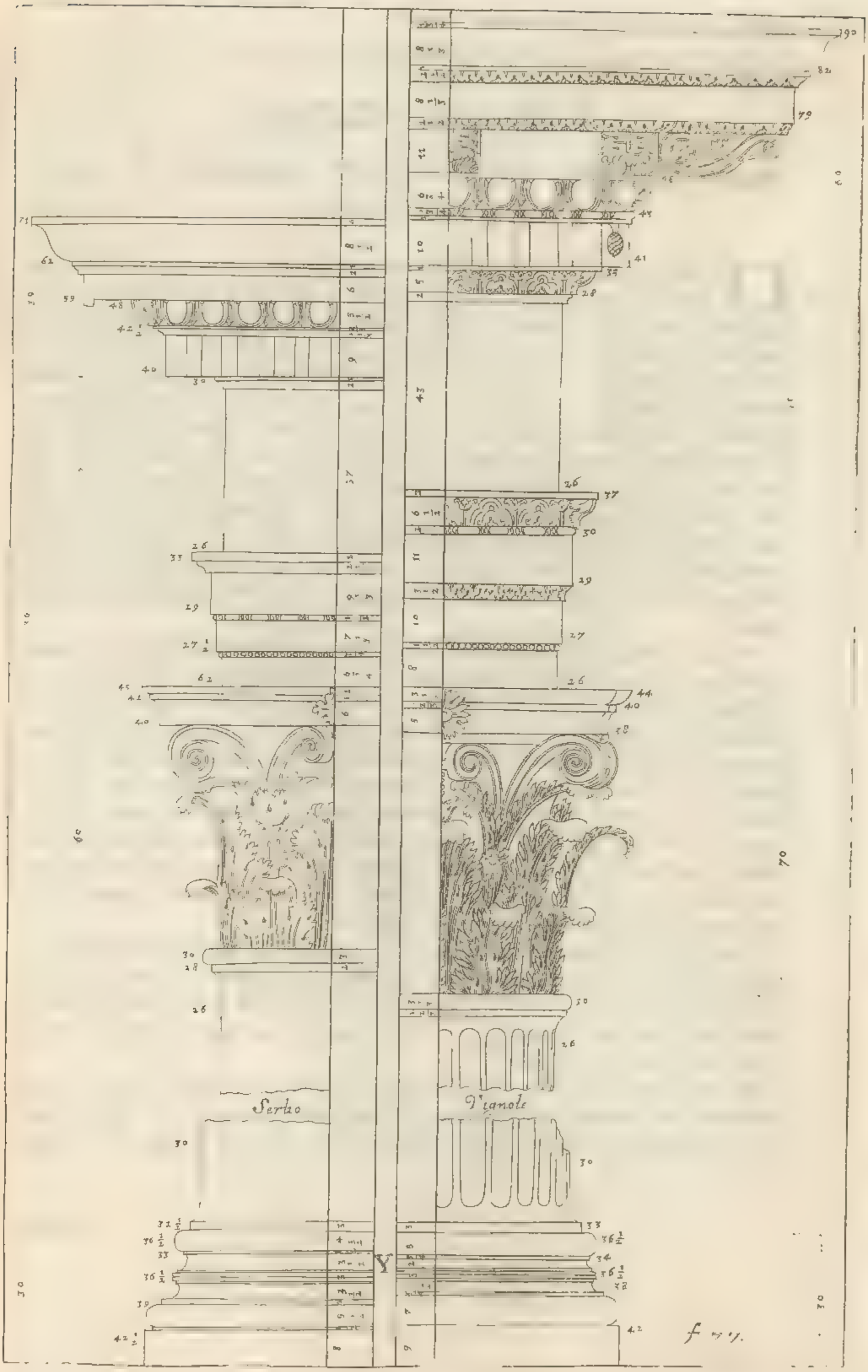

Palladio.
Scamozzi.

CHAP. XXXII.

Serlio *and* Vignola *upon the* CORINTHIAN Order.

METhinks I see here a *Giant* next a *Pigmy*; so monstrous is the disproportion 'twixt these two *Masters*: And the reason of this so extraordinary inequality proceeds from two Causes; whereof the first is, that *Serlio* allows to the *Entablature* of his *Profile* but a fifth part of the *Column*, whereas *Vignola* makes his own of an entire quarter, and exceeds even that by some *Minutes*. The second is, that *Serlio* following *Vitruvius*, makes the Altitude of his *Column* but of nine *Diameters*, and *Vignola* gives *his* ten, the same which I formerly obsery'd in the *Ionick Order*, where we met the very same inconvenience. But albeit the difference of these two *Profiles* be in general very considerable; yet coming to the particulars, what we find in their *Capitels* is of greater consequence, since we must of necessity condemn that of *Vitruvius* prescrib'd in his fourth *Book* towards the end of the first *Chapter*; there being no reason to prefer it alone to an almost innumerable number of most excellent *Modules* which remain of *Antiquity*, amongst which we meet with none in the same terms to which he has reduc'd the Height of his own; unless it be that out of respect to this grave *Author*, who is indeed worthy the reverence of all those of the *Profession*, and to avoid the invidious name of *Critick*, we should chuse a gentler way, which is to elude the *Question* after their Examples, who having already obsery'd the same mistake before us (either in effect or out of modesty) believ'd the *Text* to have been corrupted in this place as well as in divers others where the alteration is manifest; so as assisting the Sense a little, one may suppose that *Vitruvius* designing the Height of the *Corinthian Chapter* by the largeness of the *Diameter* of its *Column*, he should not have comprehended the *Abacus*, which is the sole Ambiguity of this Passage, and which indeed deserves Correction, or to be otherwise understood than *Serlio* comprehends it.

CHAP.


Serlio
Vignole
f 7 y.

CHAP. XXXIII.

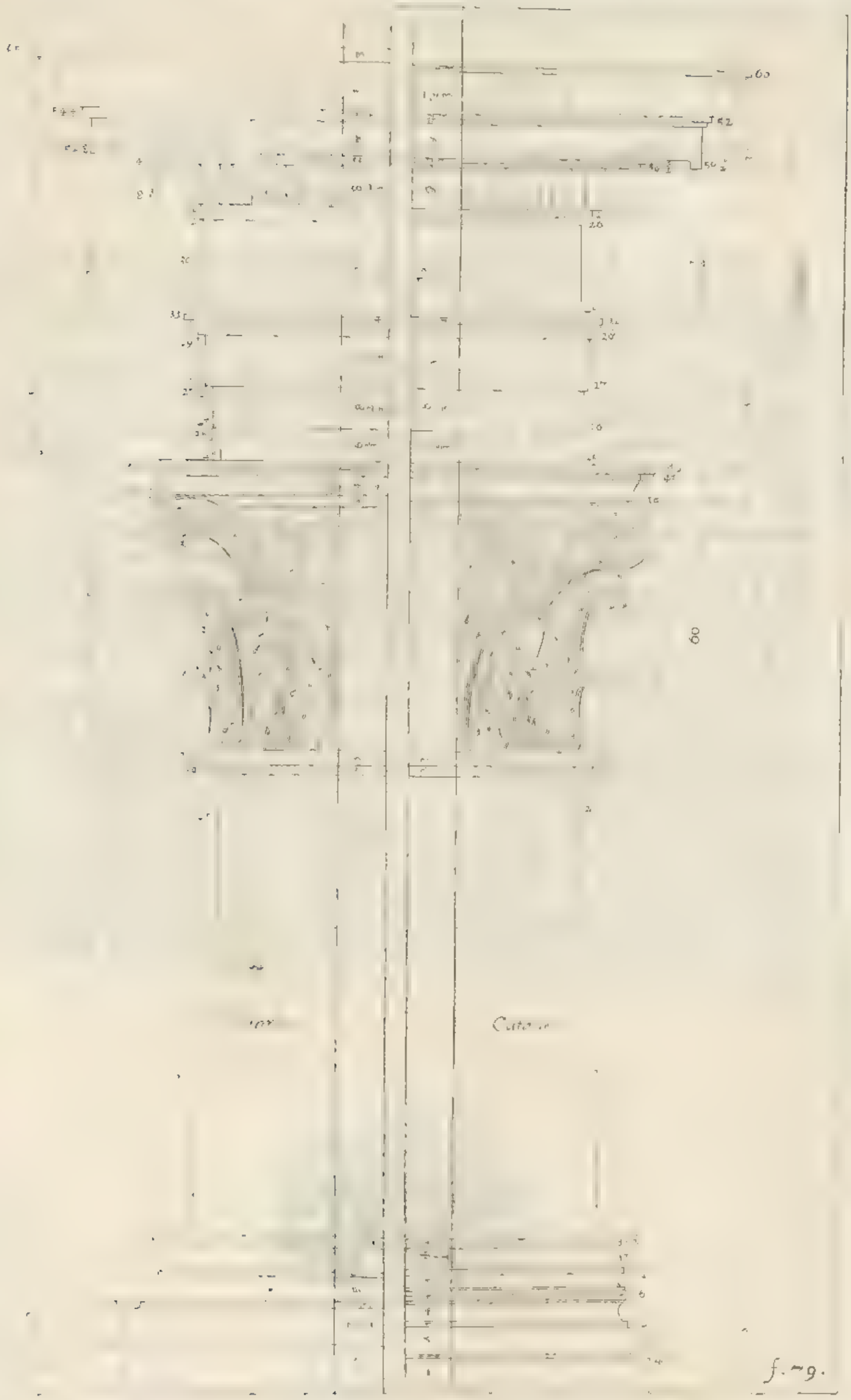
Daniel Barbaro, *and* P. Cataneo, *upon the* CORINTHIAN Order.

OF all the four *Orders* of *Architecture* deſcrib'd by *Vitruvius*, (for he ſpeaks not a Word of the *Compoſita*, which is the *fifth*,) this of the *Corinthian* appears to me to be the moſt ſlightly handled, conſidering the nobleneſs and magnificence of its *Inventors*, who having ſpar'd no coſt to render it rich and excellent beyond all the reſt, were not likely to borrow any thing from thoſe amongſt whom they were ranked. I conceive that *Vitruvius* therefore at the beginning of his fourth *Book* had no reaſon to affirm, that they uſed to imploy the *Entablature* and the *Ionick*, and ſometimes even the *Dorick Column* alſo, without any other addition ſave the *Capitel* of their own Invention; ſince by the antient Examples of this *Order* we find the contrary: But the *R. Daniel Barbaro*, his *Commentator*, whoſe Deſign is before us, is by no means to be blamed for it, whoſe Province was only to expreſs the Meaning of the *Maſter* whom he explained, and of which he has very worthily acquitted himſelf.

He has therefore fitted an *Ionick Entablature* to this *Corinthian Profile*, forming the *Capitel* of *Acanthus-leaves*, conformable to the Deſcription and Hiſtory of its Original mention'd by *Vitruvius*. I would not, for all this, adviſe any *Workman* to make uſe of this *Compoſition*; without firſt conſidering the relative Proportion which the *Entablature* ought to have with the *whole* of the *Order*, a thing that I find is here extremely changed, and a great deal leſs than it ſhould be, by reaſon of the conſiderable Height which the *Column* has received by that of the *Corinthian Chapter*, which is two thirds higher than the *Ionick*: but this is remedied by enlarging the *Freeze*, and by adding ſome new *Moulding* to the *Cornice* 'twixt the *Corona* and the *Dentelli*, as a quarter of a Circle or ſo, to carve the *Eggs* and *Anchors* in.

The *Deſign* of *Cataneo* has nothing in it remarkable, unleſs it be the extravagant *Projecture* which he allows to the *Fillet* of his *Dentelli*, as we alſo find it in the *Deſign* of *D. Barbaro*. They have both in this followed that *Maxim* which regulates the *Projecture* of every Member to its Height; but this Rule is not always to be received.

What I have ſaid in the precedent Page touching the Height of the *Capitel* according to *Vitruvius*, would here be ſuperfluous to repeat: It may therefore ſerve both for this and for all the reſt that follow, being of the ſame *Species*.



f. 79.

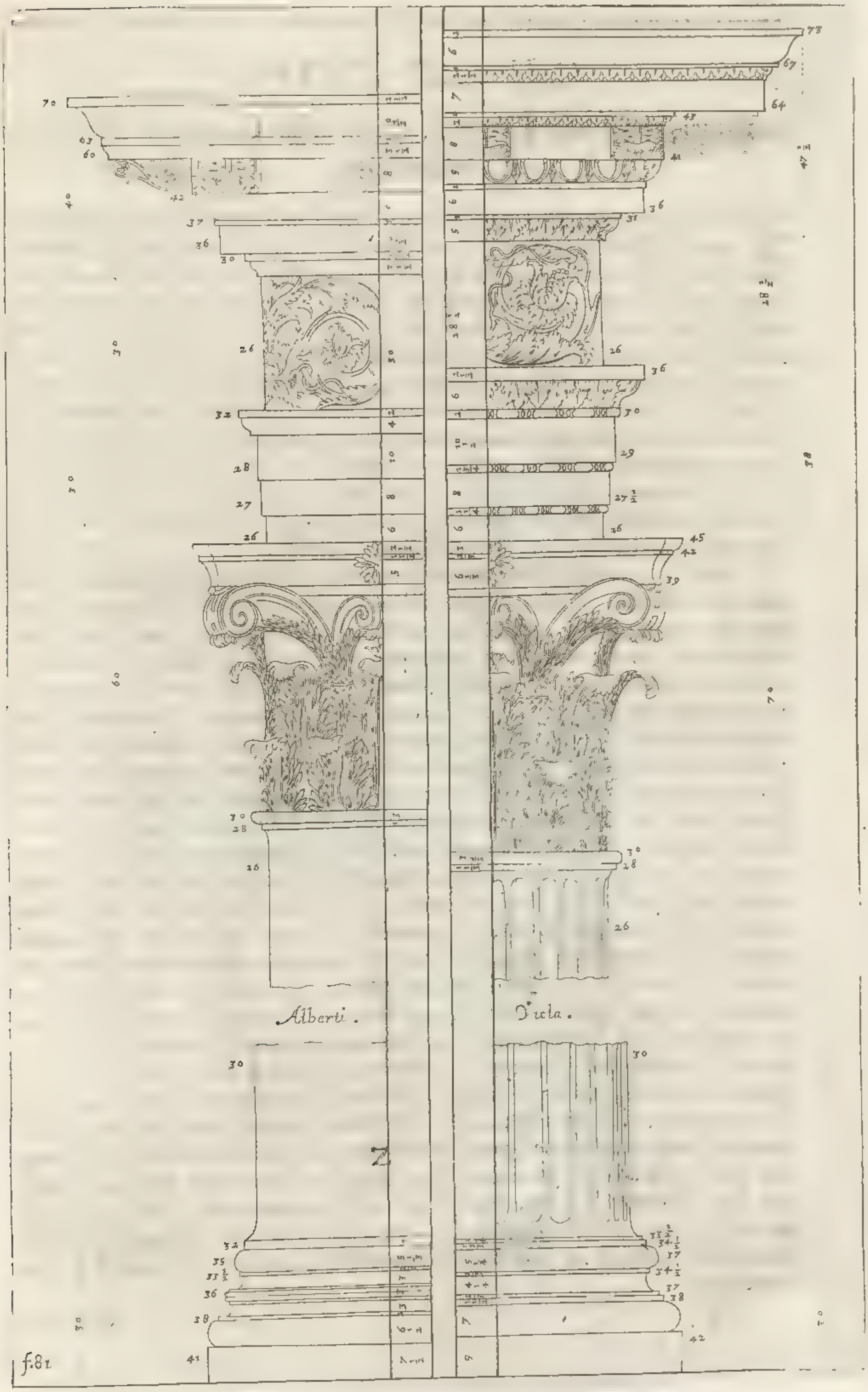
CHAP. XXXIV.

L. Baptiſta Alberti, *and* Joſeph Viola, *upon the* CORINTHIAN Order.

I Shall here need only to examine the *Deſign* of *Alberti*, That of his Companion *Viola* being but an Imitation, or rather a perfect *Copy* after the *Profile* of *Palladio*, which we have ſeen already, and to which I refer the *Reader* as to its Original.

As touching that of *L. B. Alberti*, I find two remarkable Particulars in his *Deſign*, which ſeem worthy of reprehenſion: The firſt is the low Proportion of the *Capitel*, which is only pardonable in the Followers of *Vitruvius*; for we find no Example of it amongſt the *Antients*, ſince even he himſelf imitates a Manner both greater and more noble than the *Vitruvian*. The other Obſervable is in his *Cornice*, to which he has given no *Corona*, though it be a Member ſo eſſential, and one of the principal in the *Entablature*. But though this Liberty be ſomewhat bold, and perhaps blame-worthy, yet remains there one conſiderable Example at *Rome*, in the *Cornice* of that famous *Temple of Peace*, built by the Emperor *Veſpaſian*, being one of the greateſt and moſt ſuperb *Reliques* of *Antiquity*.

The *Face* likewiſe of the *Modilions* ſeems to me of the largeſt, and beſides that the *Foliage* which domineers in the *Freeze*, holds not ſufficient conformity with the *Cornice*, as too ſimple and plain for ſo rich an Ornament: But the Remedy is at hand, by adding a few *Leaves* or other *Carvings* on the *Cymatium*'s of the *Cornice* and *Architrave*, with *Eggs* upon the Quarter Round; unleſs it be that you would rather ſave that work by abating ſomewhat of the Ornament of the *Freeze*. There will yet remain this Objection ſtill in the *Deſign*; That the *Author* reſolving rather to fix upon the *Capitel* of *Vitruvius* than on thoſe of the *Antients*, he ought not to have carv'd them with *Olive-Leaves*, ſince *Vitruvius* does expreſly order them of the *Acanthus*.

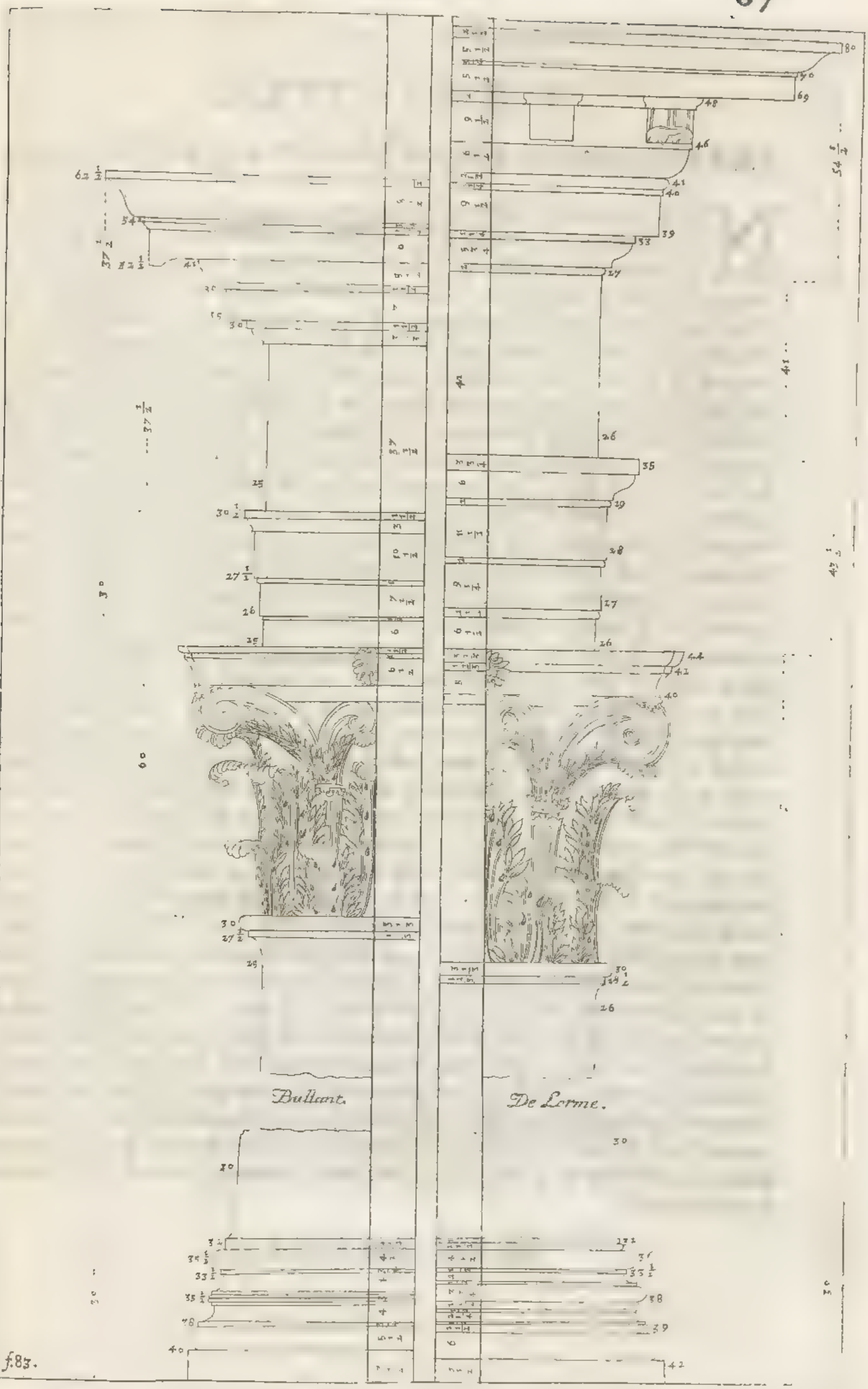

Alberti.
Vitola.
f.81

CHAP. XXXV.

Bullant, *and* de Lorme, *upon the* CORINTHIAN Order.

I ſhould do an injury to one of our prime *French Architects*, *John Bulliant* by name, if by the Examen of this *Profile* I ſhould rank him with thoſe of the *School* of *Vitruvius*, ſince he has after this given us others of a nobler Form, which he has copied from the *Antients*. But not finding him ſo perfectly exact in the Meaſures which he aſſigns them, I therefore omit 'em. He appears in this *Deſign* to have imitated *Serlio*; and indeed the Difference between them is very inconſiderable; notwithſtanding I obſerve ſomething in this that is more refin'd, as the *Projecture* of the *Dentelli* (or rather of the plain *Fillet* on which they ſhould have been cut) which is extremely regular; whereas *Serlio*'s is exceſſive, beſides the impertinent repetition of a ſmall *Ogee*, which is thrice within the Space of the *Cornice* only, but which *John Bulliant* has had the Diſcretion to diverſify. He alſo gives his *Capitel* more Grace, the Leaves and Branches whereof are better ſhaped.

I could have wiſh'd, for concluſion of our *Corinthian Order*, that *De Lorme* had left us a more regular *Deſign*, and of a better Reliſh: But the good Man, though very ſtudious, and a lover of the *Antique Architecture*, had yet a Modern *Genius*, which made him look upon thoſe excellent things of *Rome* as it were with *Gothic Eyes*; as appears plainly in this *Profile*, which he pretends to be conformable to thoſe of the *Chapels* of the *Rotunda*. For the reſt, his *Style* is ſo exceedingly perplex'd, that it is oftentimes very difficult to comprehend his meaning. The *Reader* will ſmile to ſee how he explains himſelf on the Subject of this *Cornice* ('tis in the fourth *Chapter* of his ſixth *Book*.) For having cited all the Meaſures of each Part, piece by piece, he ſays, that as to the Height of the *Architrave*, he had divided it into three and forty Parts and an half, to give every thing its Proportion; but that not falling out as it ought, he's reſolv'd to ſpeak no more of it; and theſe are his very *Terms*. As to the *Baſe* of this *Profile*, I have taken it from the End of the Second *Chapter* of the ſame *Book*. And albeit its Proportion be very extraordinary, he affirms yet to have deſign'd and meaſur d it from certain *Veſtigia's* very *Antique* (theſe are again his own Expreſſions:) You may likewiſe take notice that the Stalks or *Cauliculi* under the *Roſes* of the *Abacus*, riſe too high in this *Capitel*. In Sum, the Talent of this *Architect*, who has for all this acquir'd a great deal of Reputation, conſiſted chiefly in the contriving and ſurveying of a *Building*; and in truth, his chief Perfection lay more in the Art of *ſquaring Stones*, than in the *Compoſition* of *Orders*; and of this he has indeed written with moſt advantage and at large: But ſince him, and that very lately, the *Sieur Deſargues* of *Lyons*, one of the moſt exquiſite and ſubtile *Geometricians* of this Age, whoſe *Genius* delights to render familiar and uſeful the moſt excellent *Speculations* of that *Science*, has exalted that *Art* to a much higher Perfection.


Bullant.
De Lorme.
f.83.

CHAP. XXXVI.

The Orthography *of one of the* Altars *of the* Rotunda.

NOT to leave the Mind of our *Reader* altogether intangled amongſt the *Moderns*, and haply alſo deviating from the right Path of *Architecture*, I am preſenting him with an Example from the goodlieſt *Temple* of *Antiquity*, which is one of the *Tabernacles* now ſtanding in the *Rotunda*; that ſo he may return and be again reduc'd to this noble and perfect *Idea* of the *Art* which I have ſtill been propoſing to him in my fix'd Diſcourſe before every *Order* by the like *Examples*; upon which, as upon the moſt permanent and immoveable Foundations he ought to fix and eſtabliſh his *Studies*: For, compar'd to this, the Writings of the *Moderns* are but looſe *Earth*, and ill-bottom'd, upon which one can erect nothing that is ſubſtantial and ſolid. But having already ſufficiently treated of the *Mouldings* and *Proportions* of the *Corinthian Orders*, and that the *Deſign* which I here propoſe, is too little for the preciſely meaſuring of each Member, I ſhall only touch two or three Particulars here, which more import the general Compoſition of the *Deſign* than the Regularity of the *Order*: The firſt whereof is, that its now become as it were the *Mode*, I ſhould ſay rather an univerſal *Madneſs*, to eſteem nothing fine, but what is fill'd and ſurcharged with all ſorts of *Ornaments*, without Choice, without Diſcretion, or the leaſt Affinity either to the *Work* or the *Subject*. So as the Compoſition of this *Altar* would be eſteem'd very mean in the Opinion of our ſmall *a la Mode* Maſters; who to enrich it, would in lieu of the ſingle *Column*, which at each Side ſuſtains the *Frontiſpiece*, make a Pile of four or ſix, and haply of more, with two or three Accumulations of *Mouldings* in the *Cornice*, to break the Order and exact Evenneſs of the *Members*, whoſe Regularity is anxious to them: One *Fronton* would be likewiſe too few for them; they add frequently two and ſometimes three, and that one within the other; nor do they think it fine unleſs it be *broken*, *carv'd* and *frett*, with ſome *Eſcutcheon* or *Cartouch* at leaſt: Nay even the *Columns* themſelves, which are the Props and Foundation of the *Orders*, 'ſcape them no more than the reſt; for they not only abuſe and counterfeit them in their *Capitels* and *Baſes*, but in their very *Shafts* alſo. 'Tis now eſteem'd a *Maſter-ſtroak* to make them *wreath'd* and full of *Rings*, or ſome other *capricious* Ligatures about them, which make them appear as if they had been *glew'd* together and *repair'd*. In fine, one may truly ſay, that poor *Architecture* is very ill-treated amongſt them. But it were not juſt, to impute this great reproach to our *French* Work-men only; the *Italians* themſelves are now become more *licentious*, and ſhew us plainly that *Rome* has at preſent, as well her *Moderns* as her *Antiques*.

The End of the Firſt Part.

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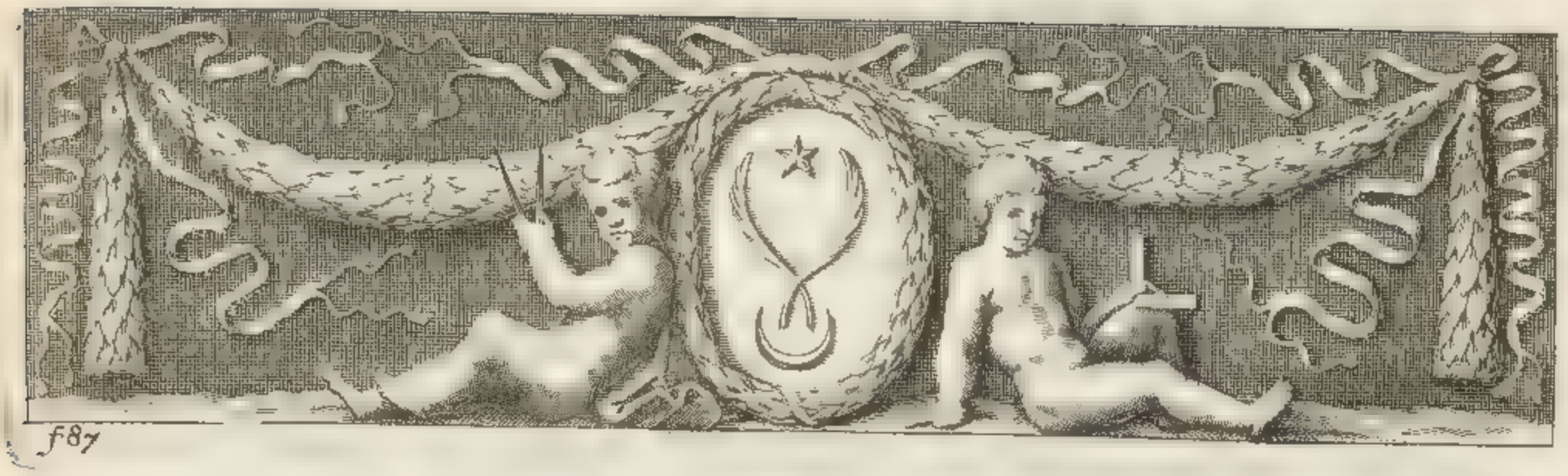

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A PARALLEL OF THE *ANCIENT ARCHITECTURE* WITH THE *MODERN*.

PART II.

CHAP. I.

Of the TUSCAN Order.

IT is an Abuſe ſo viſible in the *Architecture* of the *Moderns*, their confounding the *Greek Orders* amongſt the *Latin*, that I am aſtoniſhed at the general Inadvertency of ſo many *Authors*, as treating of their *Symmetries*, and the Particularities of their *Proportions*, have ſo diſpos'd of them, as plainly diſcovers how ignorant they were of their Proprieties and *ſpecific* Differences, without which it is ſo very difficult to make uſe of them judiciouſly.

I had already hinted ſomething in the *Preface* of the Firſt Part of this *Treatiſe*, to prepare the *Reader* for the New *Order*, which I am here obſerving; but which being contrary to vulgar Opinion and current Practice, will have much ado to eſtabliſh itſelf, and doubtleſs provoke many Adverſaries. But ſince the Foundations of this *Art* are principally fixt upon ſuch *Examples* of *Antiquity* as are yet remaining, I hope, that in time, my Opinion may prevail, ſeeing I tread but upon their Footſteps, and rather *demonſtrate* the thing, than *diſcourſe* of it.

Hitherto

Hitherto all our *Architects* have generally held that the *Tuscan Order* was a kind of *Building* which differ'd from the others only in the plainness of its *Mouldings*, solidity of its Parts; but in the rest, consisting of the same *Members*, and of like Usage: And truly I should be injurious to condemn it, since *Vitruvius* has in his fourth *Book* made a particular *Chapter* of the Manner how to build *Temples* after the *Tuscan Order*. Notwithstanding, however one might interpret what he there says, it would be very difficult to invent an handsome *Idea* of *Entablature*, fit to place upon those *Columns*. And therefore I conceive, that the only Piece of this *Order* which deserves to be put in Work, and that can properly recommend it to us, is the simple *Column* it self without any *Architrave* at all, as we find it employ'd by the *Antients*. For whereas by the ordinary usage of it, 'tis ever rang'd in the last Place; these great *Masters* have assign'd it one wholly independant from the others, and treated it so advantagiously, that it may for its Beauty and Nobleness stand in competition with all the rest of the *Orders*: Nor will this I presume be denied, when they shall have consider'd that renown'd *Example* which I am producing of the *Column* of *Trajan*, one of the most superb Remainders of the *Roman* Magnificence to be now seen standing, and which has more immortaliz'd the Emperor *Trajan*, than all the *Pens* of *Historians*. This *Mausoleum*, if so we may call it, was erected to him by the *Senate* and *People* of *Rome*, in recognition of those great Services he had render'd his *Country*; and to the End the Memory of it might remain to all succeeding Ages, and continue as long as the very *Empire* itself; they order'd them to be engraven on *Marble*, and that by the richest Touch that was ever yet employ'd. It was *Architecture* her self which was here the *Historiographer* of this new kind of *History*; and who, since it was to celebrate a *Roman*, chose none of the *Greek Orders*, (though they were incomparably the more perfect and in use even in *Italy* itself, than the two other Originals of the *Country*) left the Glory of this renown'd *Monument* should seem to be divided; and to instruct us also, that there is nothing so plain and simple but what *Art* knows how to bring to Perfection: She chose therefore a *Column* of the *Tuscan Order*, which till that time was never admitted but in Gross and *Rustick* Works; and of this rude and inform *Mass* made to emerge the richest and most noble *Master-piece* of the *World*, which *Time*, that devours all things, has preserv'd and kept entire to this very Day in the midst of an infinity of *Ruins* which even fill the City of *Rome*. And 'tis indeed a kind of *Miracle* to see, that the *Coliseum*, the *Theatre* of *Marcellus*, those great *Circus*'s, the *Baths* of *Diocletian*, of *Caracalla*, and of *Antonius*, that proud *Mole* of *Adrian's Sepulture*, the *Septizonium* of *Severus*, the *Amphitheatre* of *Augustus*, and innumerable other Structures, which seem to have been built for *Eternity*, should be at present so *ruinous* and *dilapidated*, that its hard even to divine what their original Forms were; whilst yet this *Column* of *Trajan* (whose Structure seem'd much less durable) remains extant and entire, by a secret of *Providence*, which has destin'd this stupendious *Obelisk* to the greatest *Monarch* that ever *Rome* enjoy'd, the Chief of the *Church* St. *Peter*, who possesses now the *Seat* of that *Emperor* to whom it hath been erected. But to preserve myself within the Limits of my Subject, which is only to give you its

Deſcription according to the *Deſign* of the *Architect* who was the *Author* of it, I ſhall leave to ſuch as are contemplative, the *moralizing* on this ſo wonderful *Viciſſitude*; ſince it would be here from our purpoſe, and very impertinent to the *Art* we are illuſtrating.

Let us then again return to our *Column*, and its ſingular uſe among all the *Orders* of *Architecture*, where the reſt of the *Pillars* do, in compariſon of this, appear but as ſo many *Servants* and *Slaves* of the *Edifices* which they ſupport; while ours is a *Queen* of that *Majeſty*, that reigning as it were alone, ſhe is exalted on the Throne of her *Pedeſtal*, deck'd with all the Treaſures of Glory, and from whence ſhe as freely imparts her Magnificence to all thoſe whom ſhe vouchſafes to look upon: The firſt and moſt illuſtrious of her Favourites was *Trajan*, upon whoſe *Monument* I am now forming an *Idea* of the *Order* which I would call *Tuſcan*, without troubling myſelf with what all the *Moderns* have written of it, who making no difference 'twixt it and the *Ruſtick*, do no great honour to the *Tuſcan*, while they gratifie him with ſo poor an Invention: But leſt our *Criticks* take it ill we ſhould name that a *Tuſcan Order*, which had its firſt Original at *Rome*, let them, if they pleaſe, call it the *Roman Order*; ſince they may with much more reaſon do it, than thoſe who ſo name the *Compoſita*, of which we ſhall ſpeak hereafter. For my part I regulate myſelf upon the *Profiles* of the *Capitel* and *Baſe*, which I here find to be the ſame which *Vitruvius* attributes to the *Tuſcan Column*. The moſt important Difficulty, in my Opinion, would be how our *Column*, having no *Entablature*, could be properly reckon'd in the Catalogue of *Orders*, that being ſo principal a *Member*, and in ſome Degree, the very *Head* of the *Order*. But the *Architect* of this our *Model* well foreſaw, that ſomething was to be ſubſtituted in its place, and ſo contriv'd it after a moſt excellent manner: He propos'd doubtleſs to himſelf the imitation of thoſe miraculous *Memphitick Pyramides*, which the *Ægyptians* (thoſe divine Wits to whom we are ſo much oblig'd for many excellent Arts) had formerly erected to the Memory and *Aſhes* of their *Kings*; who from the immenſe and prodigious greatneſs of their *Tombs*, one would believe had been *Giants*, and as it were *Gods* amongſt *Men*: Their *Urns* and *Statues* crown'd the *Summities* of theſe artificial *Mountains*, from whence, as from ſome auguſt and terrible *Throne*, they ſeemed to the People to reign after their Death, and that with more majeſty than when they liv'd. Our prudent *Architect* being to render the ſame Honour to *Trajan*, the worthieſt *Prince* that till then had born the Title of *Emperour*, and whom the *City* of *Rome* did ſtrive to immortalize; reflected ſeriouſly upon thoſe ſtupendous Works, whence he drew this high and ſublime imitation, which we ſo much admire, and which has ſince become a *Rule*, and been follow'd on ſundry other Occaſions: Two moſt renowned *Examples* of this are yet remaining; the *Column* of *Antonimus* at *Rome* alſo, and that at *Conſtantinople*, erected to the *Emperour Theodoſius* after his Victory againſt the *Scythians*; which ſufficiently teſtify by their reſemblance to that of our *Trajan*, that this kind of *Architecture* paſs'd currently for an *Order* amongſt the *Maſters* of the *Art*, ſeeing they always employ'd it ever ſince upon the ſame Occaſions, together with *Tuſcan Profilures* both at the *Baſe* and *Capitel*. This eſtabliſhed, the reſt will eaſily follow, ſo as not to ſubject it henceforward to the Opinion and Diverſity of the *Guſto's* of thoſe of

the Profeſſion, ſince we have the *Original* for our *Model*, to which we ought of neceſſity to conform, leſt we tranſgreſs the Terms and Regularity of the *Order*. Now ſuppoſe an *Architect* be on ſome occaſion oblig'd to introduce or change any thing in it, as the time and quality of this Deſign may require; he is yet to proceed with extraordinary circumſpection, and without in the leaſt altering the *Form* of the principal *Members*; in which one ſhall perceive the Addreſs of his Spirit, and the Gallantry of his Invention. This is a *Maxim* ſo univerſal through the *Orders*, that without it one ſhould never pretend to give Rules, nor propoſe indeed any Example for imitation; ſo naturally obnoxious indeed are our inclinations to Novelty, and ſo blind in our own Productions. See then from what ſource the Confuſion of that *Order* ſprung, which they name the *Compoſita*, and which the preſumption and ignorance of *Workmen* has begotten, like an extravagant *Monſter* blended with ſo many Natures, and ſometimes ſo averſe and contrary, that 'tis impoſſible to diſtinguiſh their *Species*: I have reſerv'd their full *Examen* for the Concluſion of this *Treatiſe*, where I ſhall make choice of what I meet with of moſt conformity to the Rules of *Art* and of good *Architecture*, and where I ſhall produce ſome of the moſt famous *Examples* of *Antiquity*, that at leaſt Men may have faithful Guides through this *Labyrinth* of Confuſion.

Our *Trajan Column* which we here ſubſtitute inſtead of the *Tuſcan Order*, by the Prerogative of its excellent Compoſition, has this advantage above the other *Orders*, that there ſeldom happening Occaſions worthy of it; that is to ſay, ſuch as are particular and noble enough to merit the putting it in practice; our *ſmall Maſters* incapable of ſo high an Employment, have ſpoken nothing of it, and by this means ſhe has remain'd in her original purity: But the firſt which was ever made in imitation of it, and that exceedingly confirm'd the Eſtabliſhment of this new *Order*, was the *Column* of *Antoninus*, which is yet very entire, and the only *Paragon* to ours, though it concede ſomewhat to it in the execution and *magiſterial* handling; but in recompence of this, it ſurpaſſes it in the greatneſs of its *Maſs*, a thing very conſiderable in this *Order*, whoſe *ſpecifick* Beauty conſiſts in being vaſt, and of a manner *Coloſſeal*. For the reſt, the *Compoſition* and *Ordinance* of the whole Deſign are very alike.

I will now ſhew in general, the Effect and Form of the principal Members, and of what one ought to be careful in the application of *Ornaments*, which are to be diſpoſed with great Diſcretion, as being of the very *Eſſence* and Body of the *Order*. The firſt, and as it were the Foundation of the whole Structure is the *Pedeſtal*, which is here no leſs neceſſary than is the *Cornice* to the *Columns* of the other *Orders*; and its Proportion, though ſquare and ſolid, requires an enrichment of handſome *Modenatures*, and of all other ſorts of Ornaments at the *Plinth* and *Cymatium*, but above all in its four *Faces*, which are, as it were, the *Tables* of *Renown*, where ſhe paints the *Victories* of thoſe *Heroes* to whom ſhe erects ſuch glorious *Trophies*. It is there that we behold all the *Military Spoils* of the vanquiſh'd, their *Arms*, the *Machines* they made uſe of in fight, their *Enſigns*, *Shields*, *Cymeters*, the *Harneſs* of their *Horſes* and of their *Chariots*, their *Habiliments* of *War*, the marks of their *Religion*, and in a word, what ever could contribute to the pomp and magnificence of a *Triumph*. Upon this glorious *Booty*, our *Column*, as on a

Throne is erected and reveſted with the moſt rich and ſplendid Apparel which *Art* can invent; and indeed, provided the *Architect* be a judicious Perſon, it cannot be too glorious: I repeat it again, that this ought in no ſort to alter or in the leaſt confound the *Proportions* and *Tuſcan* Profiles of the *Baſe* and *Capital*, as being the very Keys of the Conſort and Harmony of the whole *Order*. The laſt, but principal thing, becauſe it ſets the *Crown* upon the whole Work, is the *Statue* of the *Perſon* to whom we erect this ſuperb and magnificent Structure; this hath an *Urn* under his Feet, as intimating a Renaſcency from his own *Aſhes*, like the *Phenix*, and that the *Vertue* of great Men triumphs over *Deſtiny*, which has a power only over the Vulgar.

As to what concerns the regular *Proportion* of this *Figure* and *Urn*, with the Altitude of the *Column*, I can here conclude nothing preciſely, this part being repair'd in the *Original*, and that in a manner too modern and wide of the firſt Intention of the *Architect*, to derive any advantage thence for our Subject. It may yet be ſaid with likelyhood enough, that ſince 'tis as 'twere the *Entablature* of the *Order*, one ſhould allow it a fourth part of the *Column*, as to the *Trabeation* of the *Dorick Order*, to which this bears a very great reſemblance. I conceive alſo, that the *Figure* ought ſo to be proportion'd by the Rules of *Opticks*, that it may appear of a Size ſomewhat exceeding the *Natural*, and of an elegant *Symmetry*, that ſo it may be taken notice of above all the reſt; but with this Diſcretion yet, that being of neceſſity to ſtand on its Feet, it appear of a firm Poſition, and that the *Maſs* of the *Urn* which ſerves it for *Pedeſtal*, have a ſolidneſs agreeable to this effect: For 'tis a thing greatly obliging in *Architecture*, to make every thing not only ſolid and durable, but that it likewiſe ſo appear, and thereby avoid that *Gothic* Indecorum which affects it as a Beauty; the making of their Works ſeem as 'twere hanging in the *Air* and ready to fall upon ones head, which is an Extravagance too viſible for us to ſpend any time in confuting.

By this time I think I have left nothing unſaid which concerns the general *Compoſition* of our *Column*. As for the leſſer retail of the *Proportions* and *Profiles* of each *Member*, the *Deſign* ſhews them ſo perſpicuouſly, that 'twere but a childiſh and impertinent Labour to name them over one by one, as thoſe firſt Inventors of *Painting* did, who, to ſupply the weakneſs of the *Art*, not yet arriv'd to ſo natural a repreſentation of the things they imitated, were forc'd to write under them, This is an *Ox*, a *Tree*, a *Horſe*, a *Mountain*, &c. There will be no need of this here, the Effect of the *Deſign* having ſo far exceeded the Expreſſion of all Words, that it ſhews us more things in an inſtant, and that with infinite more preciſeneſs, than could have been deſcrib'd by Diſcourſe in a very long time. I will therefore conclude by this rare kind of *Language*, which has neither need of *Ears* nor *Tongue*, and which is indeed the moſt divine *Invention* that was ever yet found out by Man.

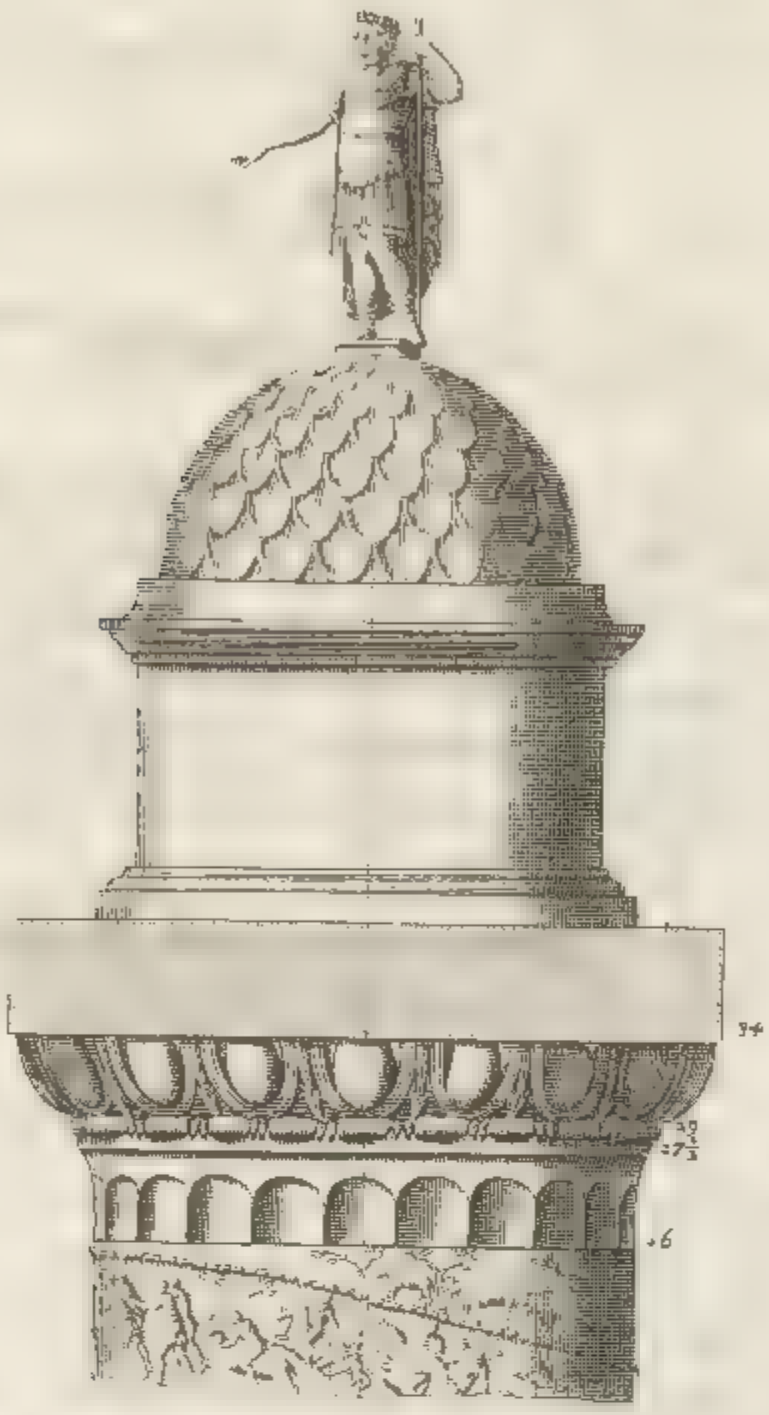
For the reſt, you will in my *Profile* of the *Trajan Column* perceive with what diligence and exactitude all theſe things conform to the Original, even to the very leaſt Ornaments, and thereby judge how exceedingly careful I have been in other things of greater conſequence. If the *Reader* be intelligent, and that he have attentively view'd, and with a maſterly Eye, this rich

and

and incomparable Piece which I describe, the Satisfaction he will derive from the accurate Observations I have made, and here present him, will be proportion'd to his Ability : For in these Particulars our Eyes see no further than our Understanding purges them ; nor do their admirable Beauties reveal themselves at once, nor to all the World in general ; they will be curiously observ'd and discover'd with Industry. There are likewise several kinds which every one considers according to the force of his Wit, and as they conform to his *Genius*. Some there are who seek only the Grace and Neatness of *Ornaments* ; others consider the Nobleness of the *Work*, and Novelty of the *Invention* ; the most knowing have regard to the *Proportions* chiefly, and the regularity of the whole with its Parts, to the judicious Composition, the greatness and solidity of the *Design*, and such essential Beauties as are only visible to the Eyes of the most intelligent *Architects* ; from whence it often falls out, that the same Work in which all these parts are not equally perfect, is variously esteem'd by those of the *Profession*; (for there are but few like this of ours so qualified as to merit a universal Approbation) and the misery of it is, that the best things have for the most part many fewer *Admirers* than the *indifferent*, because their are more *Dunces* than *able Men*.

The Module of the following *Design*, and the Method of *decyphering*, is the same with what went before ; *viz.* That passing a *Perpendicular* through the *Center* of the *Column* the whole Height of the *Order*, I divide the *Semidiameter* of the *Pillar* at the foot into thirty *Minutes*, which compose the *Module*, upon which I afterwards regulate all the *Members* as well for their Height as Sailings over, and *Projecture* of their *Profiles*, still beginning by this *Central* Line of the *Column*, that so the Position of each individual Part be exactly adjusted and precisely in its place. This is so perspicuous, and has been so oft repeated, that there can remain no possible Difficulty.

As to what now concerns the whole *Mass*, the *Column* contains seventeen *Modules*, comprehending the *Base* and *Capitel*. The *Pedestal* with its entire *Bassament*, *Cymatium*, and that *Zocolo* or *Plynth* above wrought with a *Festoon* (which in my judgment makes a part of it, as rendering it a perfect *Cube*, of all *Geometrical* Proportions the most regular and solid, and consequently most agreeable to this Structure) has in Height three *Modules*, a very little less : The *Base* of the *Column* contains precisely one, and the *Capitel* two thirds of a *Module*.



Trajans Columna.

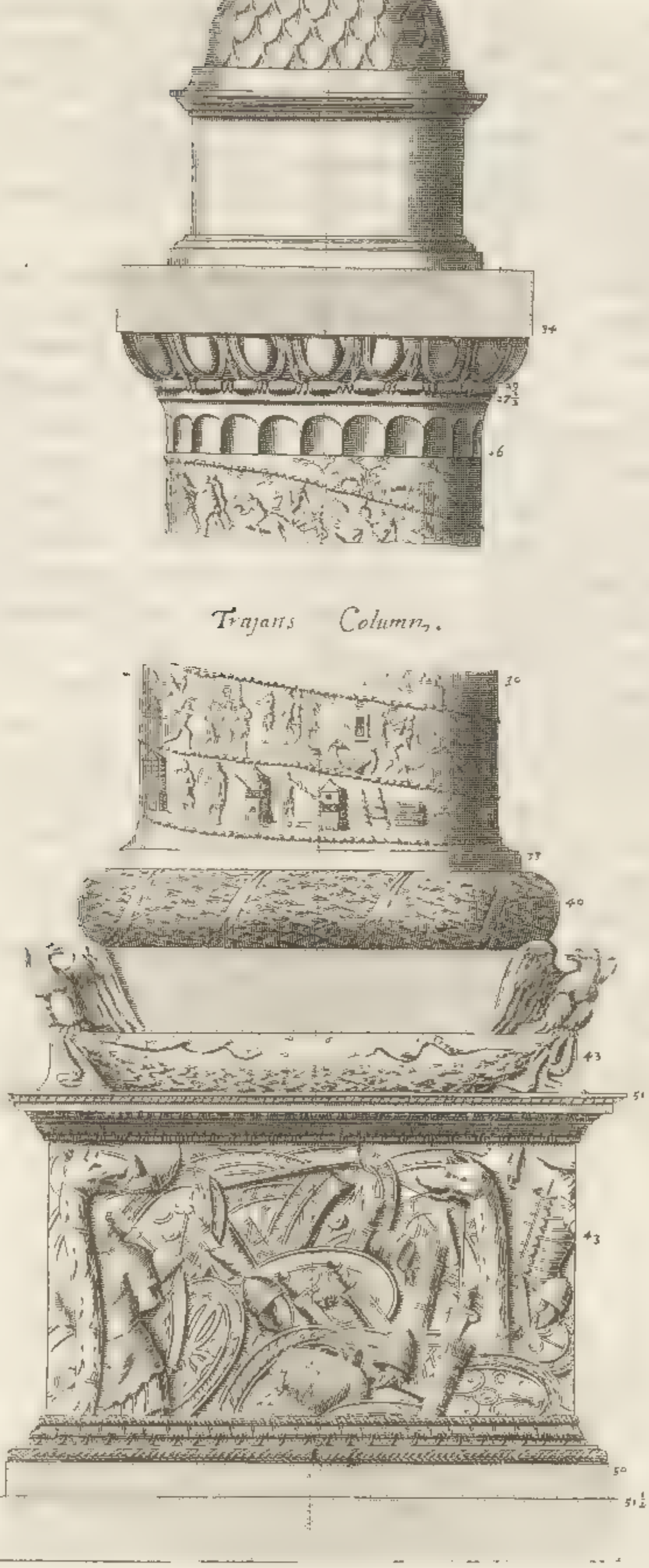


fig.

CHAP. II.

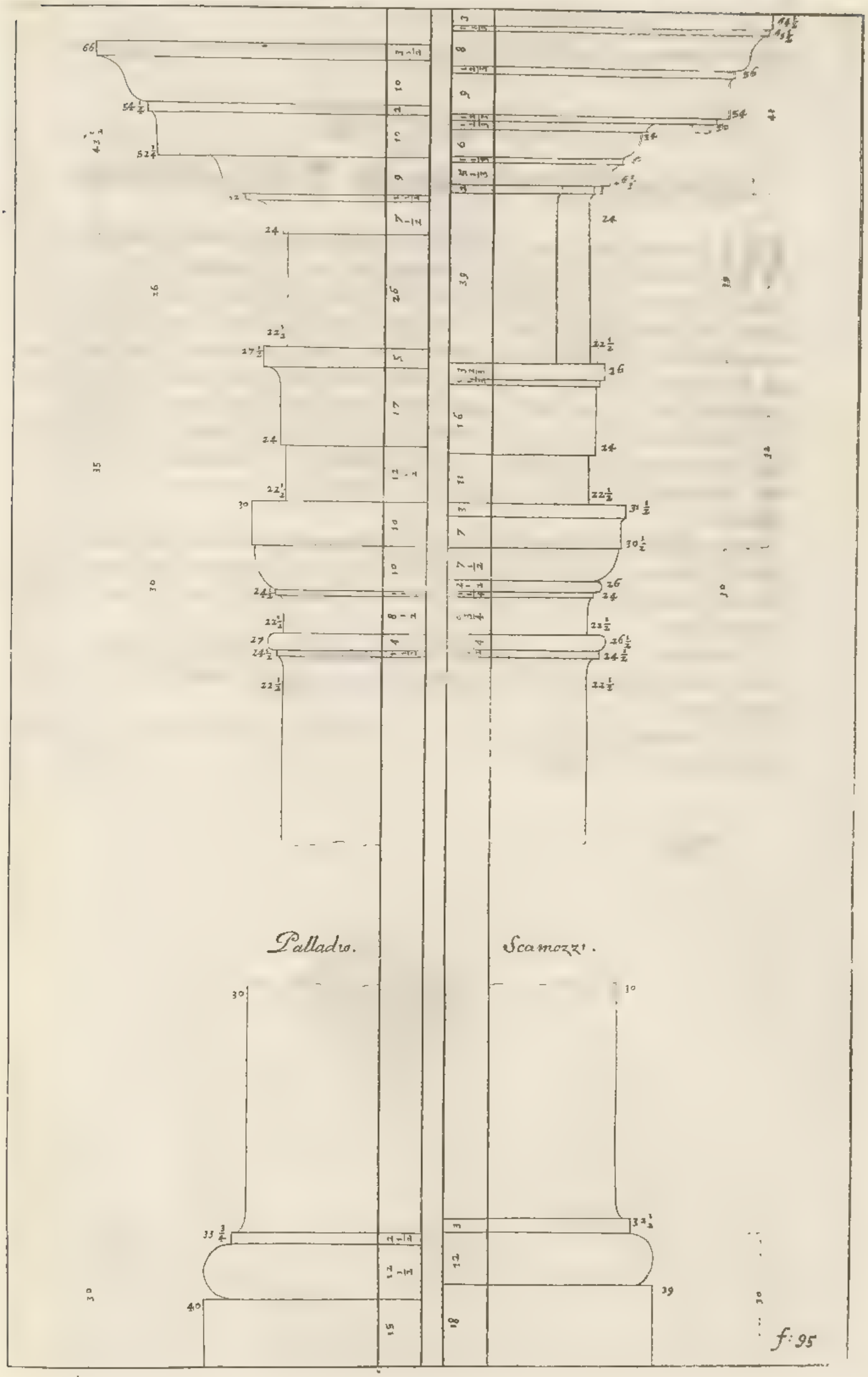
Palladio *and* Scamozzi *upon the* TUSCAN Order.

HAving declar'd my Opinion touching the Uſe and Form of the *Tuſcan Order* after the manner of the *Antients*; I will now deſcribe to you after what faſhion our *Modern Maſters* have handled it, and in what reputation it is at preſent amongſt all our *Workmen*, who in regard of the meanneſs of ſo poor a *Compoſition*, ſurname it the *Ruſtick Order*, and that with reaſon, there being ſo little probability that the *Tuſcans* would ever own or acknowledge it in ſo wretched a Condition.

Andrew Palladio, of all the *Moderns* the moſt judicious, and to whom in this *Collection* we have aſſign'd the moſt eminent Place, preſents us with two *Profiles*; one whereof is ſo plain, that it has only a *Summer* of *Timber* cover'd with another piece inſtead of a *Coping* and *Corona* for the *Entablature* of the *Column*; and I conceive he imagin'd it ſhould have no other, from what *Vitruvius* has written of it. But finding this *Compoſition* too meanly handled to merit the honour of an *Order*, this induſtrious *Architect* went and ſearch'd amongſt the old Relicks of *Amphitheaters*, which are thoſe enormous Maſſes of *Architecture*, where the Solidity of the Building was more requiſite than the Spruceneſs, and Curioſity of the *Orders*; till in fine, he diſcover'd in the *Arena*'s of *Verona*, *Polo*, and other Places, a certain *Order*, which he conceiv'd one might call the *Tuſcan*, in imitation whereof he compoſed this: For he did not tie himſelf preciſely to follow one rather than the other; but from many he form'd and ordain'd this, which I have rather choſen than any of the other *Maſters*. That of his Companion *Scamozzi*, might paſs tolerably well, had he not aſſign'd him a too great conformity with the *Dorick*, and not ſo much as once mention'd where he had ſeen any like it; ſo as being altogether *Modern*, and near as rich in *Mouldings* as the *Dorick* itſelf, it were much better to make uſe of the *Antique*; this being nothing conſiderable for a building, but for its Cheapneſs and the ſaving of Time.

The Height of the *Column* with its *Baſe* and *Capitels*, is of ſeven *Diameters*, only, according to *Palladio*. *Scamozzi* allows to his ſeven and an half.

The *Entablature* contains always a fourth part of the *Column*.


Palladio.
Scamozzi.
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CHAP. III.

Serlio *and* Vignola *upon the* TUSCAN Order.

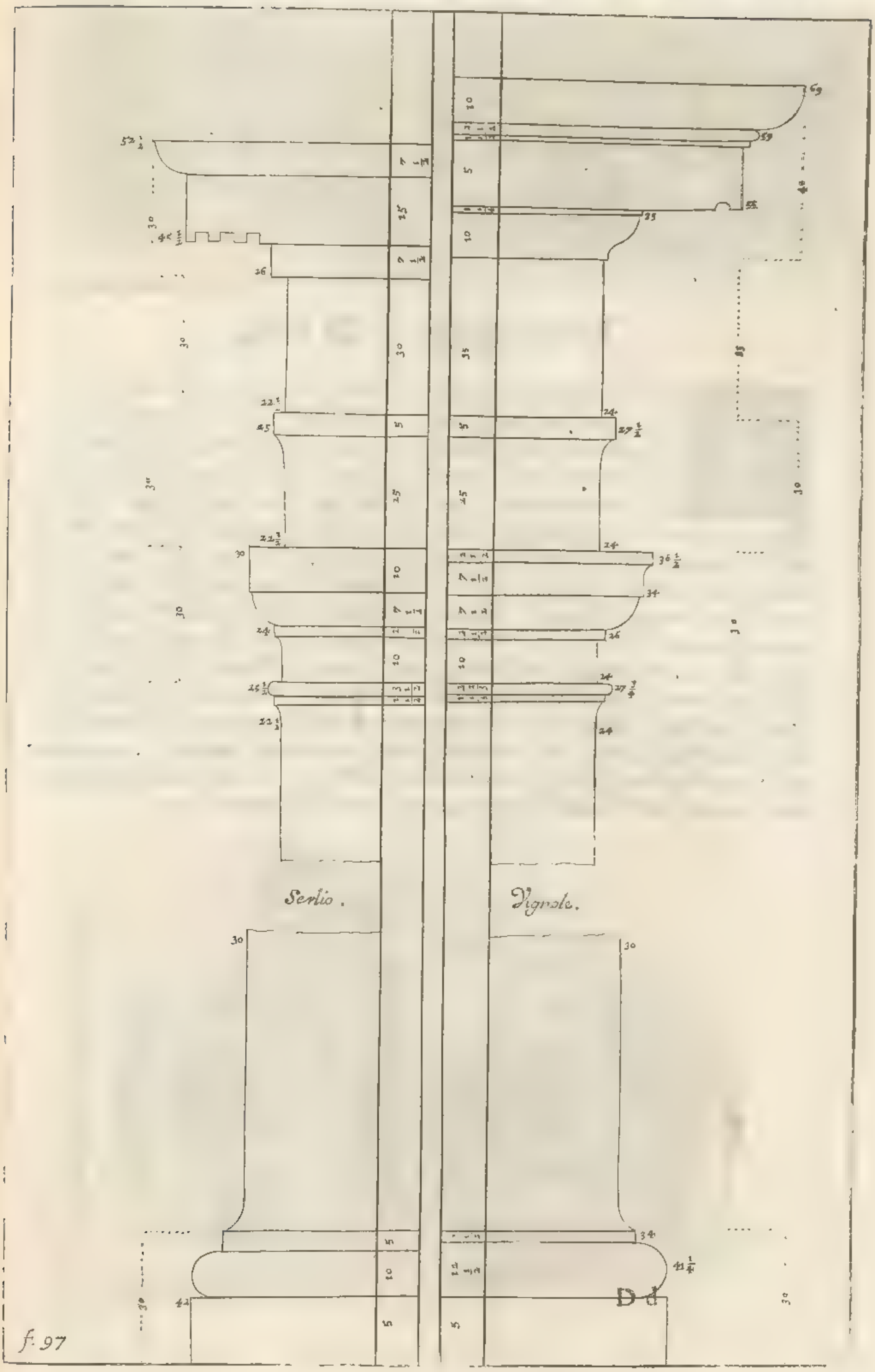
WE have ſeen in the precedent *Chapter* the *Tuſcan Order* of our Modern *Architects* in its moſt advantageous Luſtre; but methinks it is extremely decay'd here, eſpecially in the *Profile* of *Serlio*, where the Whole is indeed too plain and particular, being the only Perſon who has allow'd to every Member of the *Order* in general, *Baſe*, *Capitel*, *Architrave*, *Freeze* and *Cornice* like an Altitude; this Equality being here but a falſe kind of *Proportion*, and wholly repugnant to what *Architecture* has borrowed from the *Opticks*.

Vignola has in this reſpect proceeded more rationally, adding to each Member what it might diminiſh of its Magnitude by the diſtance from the Eye; and therefore he has made the *Cornice* ſomewhat higher then the *Freeze* or *Architrave*.

Serlio allows his *Column* but ſix *Diameters*; though *Vitruvius* (whom he always ſtrives to follow) gives it ſeven in his *Chapter* where he treats of building *Temples* after the *Tuſcan* Manner, which is the Seventh of his Fourth *Book*.

Vignola, as to what imports the *Column*, conforms himſelf to *Vitruvius*; but for the Mouldings of the *Capitel* and *Cornice*, is govern'd wholly by his particular Fancy.

The *Entablature* both in the one and the other of theſe two *Profiles*, conſiſts of a quarter of the *Column*.


Serlio.
Vignole.
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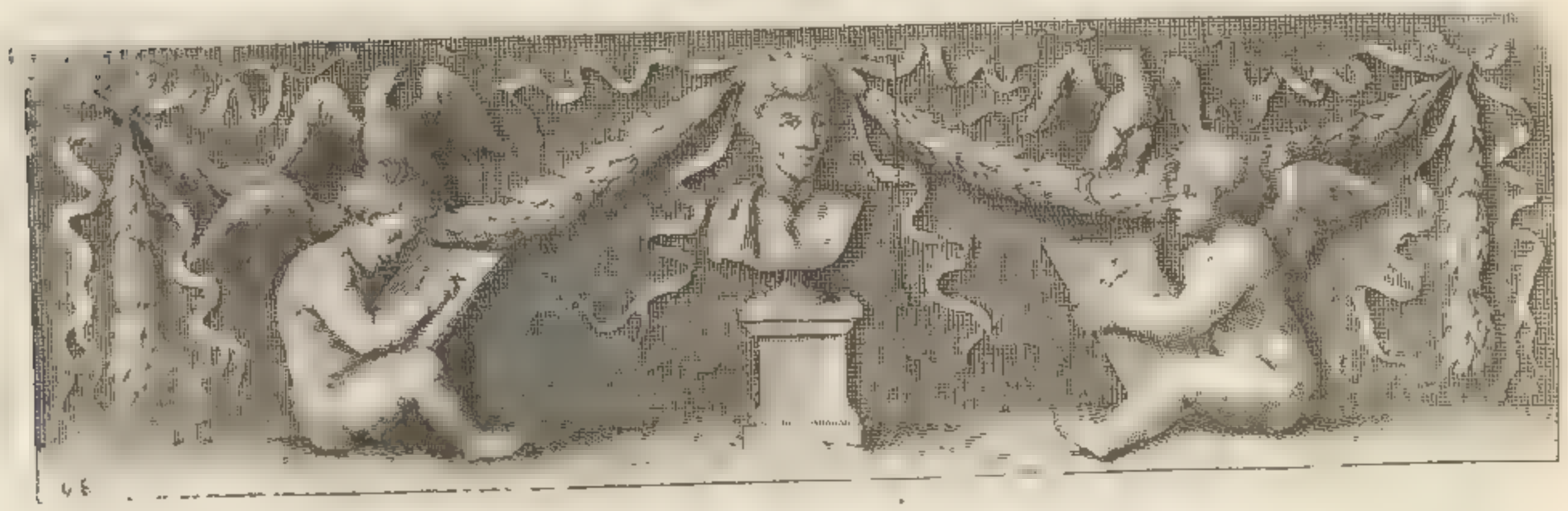

To the READER.

'TWERE altogether a fruitleſs *Study*, and but labour loſt, to continue any longer in queſt of this *Order* after other *Architects*, beſides thoſe *four*, whoſe *Deſigns* I have lately produc'd: I am therefore reſolv'd to proceed no farther; conſidering withal, that thoſe who remain, are (for the moſt part) of *Vitruvius*'s School, from whence it is exceedingly difficult to collect any thing more eſſential to the *Tuſcan Order*, than the meer ſimple Form of the *Baſe* and *Capitel*, which are already deſcrib'd in the *Profile* of *Serlio*, whereof the Repetition would be but ſuperfluous. As to what concerns the *Entablature*, ſince there remains extant no antient well-confirm'd and poſitive *Example*, nor indeed ſo much as any intelligible Deſcription of it in the Writings of *Vitruvius*, I ſhall make no great reckoning of their *Inventions*. I have likewiſe obſerv'd, that *Leon Baptiſta Alberti* (the very beſt of thoſe which remain after *Daniel Barbaro*) has ſpoken of it, but curſorily only, as in truth making no account of it, and without giving us ſo much as a *Profile*. As little does he eſteem the *Compoſita*, of which *Vitruvius* too has been altogether ſilent.

CHAP. IV.

Of the Compounded Order.

THE *Compounded Order*, which has hitherto obtain'd the firſt rank amongſt the *Moderns*, will find itſelf extremely debas'd in this ſevere and exact Review, which I have made upon the Five *Orders*; and where (without at all regarding the Opinion of the *Vulgar*, and the Judgment of others that have written before me) I value nothing unleſs it be conformable to ſome famous and antient *Example*, or to the Precepts of *Vitruvius*, that *Father* of *Architects*; that ſo (if poſſible) I may at laſt re-eſtabliſh the *Art* on its genuine *Principles* and original Purity, from whence thoſe licentious *Compoſitions* of our late *Workmen* have ſo exceedingly perverted it (under the pretext, forſooth, of this *feign'd* Name of the *Compounded Order*,) that there hardly remains ſo much as the leaſt *Idea* of regular *Architecture* in it; ſo ſtrangely thoſe *Orders*, which contributed to it, degenerated into Confuſion, becoming even *Barbarous* themſelves by this extravagant Mixture. But as 'tis a thing very difficult to ſubdue and reduce ſome Spirits to their Devoir, when once they have taken a bent and are abandon'd to *Libertiniſm*; ſo, nor do I pretend to gain any *Diſciples*, or be ſo much as heard by thoſe who have thus preſumptuouſly taken upon them to be *Maſters*, becauſe they are either grown too old in their deprav'd *Guſto*, or aſhamed to acknowledge their Miſtake; reſolving rather to periſh in their own *Opinion*, by obſtinately defending it, then be ſo ingenuous as to reform it. I addreſs my Diſcourſe then to thoſe Perſons only, who having not as yet their Imaginations prepoſſeſs'd, preſerve their Judgment more entire, and are better diſpos'd to diſcern thoſe charming Beauties and Originals of the Antient *Architecture*, acknowledg'd for ſo many *Ages*, confirm'd by ſuch a multitude of *Examples*, and ſo univerſally admired. Now foraſmuch then as it is a thing of main importance, that we ſeaſon our young Spirits with an early Tincture, and begin betimes to ſettle in them theſe *Ideas*, I do ever at firſt propoſe to them the ſame *Models* that have been left us by thoſe great *Genius's*, as ſo many *Pilots* and *Compaſſes* ſteering the direct *Courſe* to the *Art*, and ſaving them from that Propenſion which they naturally have to *Novelty*, the very *Rock* and *Precipice* of the firſt Inclinations of the *French*; which being once overpaſs'd, Reaſon does then begin to take the *Helm*, to conduct and let them ſee things ſuch as they ought to be, that is to ſay, in their *Principles*, without which it will be altogether impoſſible to acquire more than a very ordinary and ſuperficial comprehenſion of them; and thoſe who travel by any other Path, grope like blind Men in the dark, and walk unſecurely, without ever finding any real Satisfaction in their *Work:* For the vain Complaiſance of ignorent Men, be it that they take it from themſelves (as commonly they do,) or that it be deriv'd to them from ſuch as are like them, 'tis ſo empty and falſe a Joy, as it oftentimes turns to ſhame and confuſion; whilſt the true and

ſolid Praiſe which is attributed to the Merit of knowing *Maſters*, and the Excellency of their *Workmanſhip*, is never obnoxious to this Self-deception. Now how little ſoever it be a Man poſſeſſes of the *Idea* of this high *Manner* of the *Antients*, and the Greatneſs of their Thoughts, he ſhould ſoon perceive the Meanneſs and Impertinency of our *Modern Compoſition*, when in the midſt of ſo many *Examples* of the incomparable and only *Architecture* of the *Greeks*, which was the Ornament and Splendour of the Antient *Rome* (whoſe very *Ruines* and *Veſtia's* render her yet *auguſt* above all the *Cities* of the *World*;) theſe wretched and trifling Spirits, indigent in the midſt of ſo great abundance, depart from the right way which theſe great *Maſters* have opened to them, taking a devious path to purſue an Abortive of *Architecture*, or the evil *Genius* of the Art rather, which has introduc'd itſelf amongſt the *Orders* under the Title of *Compoſita*, the favour of Mens Ignorance, and the indiſcreet Preſumption of I know not what pitiful new *Architects*, who have made it their *Fools Bauble*, and clad it in ſo many *Apiſh* and *Capricious* Modes, that 'tis now become a ridiculous *Chimera*, and, like a *Proteus*, not to be fixt to any conſtant Form; ſo as it would be altogether Labour in vain, an idle and fooliſh Enterprize for us to ſearch after it here through all its wild and unlimited Extent, ſince it has neither *Rules* nor *Meaſures*, *Principles*, *Species*, nor particular *Propriety*, and ſo by conſequence not to be comprehended under the name of an *Order*. It would in truth (in my Opinion) be neceſſary for the Good of the *Art*, and the Reputation of *Architecture*, that this *Monſter* were altogether ſmother'd, and that ſome more pertinent and ſpecifick name were given to thoſe excellent *Profiles*, which we encounter amongſt ſome *Antiquities* of the *grand Deſign* which (from I know not what *Tradition*) are call'd of the *Compounded Order*; a Name altogether novel, not ſo much as once mention'd by *Vitruvius*, and which is in earneſt too general and uncertain to ſuit with a regular *Order*; and that ſince they refer the Glory of its Invention to the *Romans*, it were much more proper to call it the *Roman* or *Latin Order*, as *Scamozzi* has judiciouſly enough done, and moreover obſerv'd, that its *Capitel* (by which alone it differs from the *Corinthian*) is of a more maſſy and leſs elegant *Compoſition*, whence he conceives this *Order* ſhould not be plac'd upon the *Corinthian*, leſt the weak be burthen'd with the ſtronger: To which he might alſo add, that they can never conſiſt in the ſame Work together, as I have elſewhere demonſtrated, and that this is ſo perſpicuous, that it admits of no poſſible Extenuation: However, thoſe who would take advantage of this evil Practice and Abuſe of the *Moderns* to do the contrary, might have a way to eſcape by this *Aſinine-Bridge*. For the Importance is very inconſiderable in compariſon to that unbridled Licence which now a-days reigns amongſt our *Compoſiters* of the *Compoſita*, who not only change the Rank of the *Orders*, but reverſe and overturn even all their *Principles*, undermining the Foundations of true *Architecture* to introduce a new *Tramontane* more barbarous and unſightly than even the *Gothick* itſelf. But to all this let us reply, (in confuſion of its *Inventers*) that an *Architect* ſhould no more employ his Induſtry and Study in finding out new *Orders*, to ſet a value upon his *Works*, and render himſelf an able Man, than ſhould an *Orator*, to acquire the reputation of being *Eloquent*, invent and coin new *Words* that were yet ne-

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ver ſpoken; or a *Poet* compoſe Verſe of another *Cadence*, and meaſure then what are preſcrib'd and are in uſe; this Affectation being altogether *puerile* and impertinent: or, admit one would upon ſome Occaſion take any ſuch Liberty, it ought to be with ſuch Diſcretion, and ſo to the Purpoſe, that the Reaſon thereof ſhould to any one appear immediately. Thus it was the *Antients* made uſe of it, but with ſo great *Caution*, as that they have confin'd their entire Licence to the ſole Form of the *Capitel*, of which they have deviſed an hundred gentle *Compoſitions*, and to ſome Subjects *peculiar*, where they ſucceeded incomparably, and out of whoſe *Limits* one cannot (without manifeſt Impertinency) employ it in any Work whatſoever. I will therefore chooſe two or three *Examples* amongſt a good number of *Deſigns*, which lie by me of that moſt famous *Pyrrho Ligorio*, found out and obſerv'd by him in ſeveral Places of *Italy* with a Diligence ineſtimable. But let us firſt conclude our prime *Subject*, which is to form the *Roman Compoſita*, and make of it here as regular and preciſe an *Order* as any of the former Four. I propoſe (for this effect) two antique *Profiles*, both of them excellent in their Kinds; one very rich and full of Ornaments, taken from the *Arch* of *Titus* at *Rome*; and the other much plainer indeed, but great and proud, being that of the *Arco de Leoni* at *Verona*.

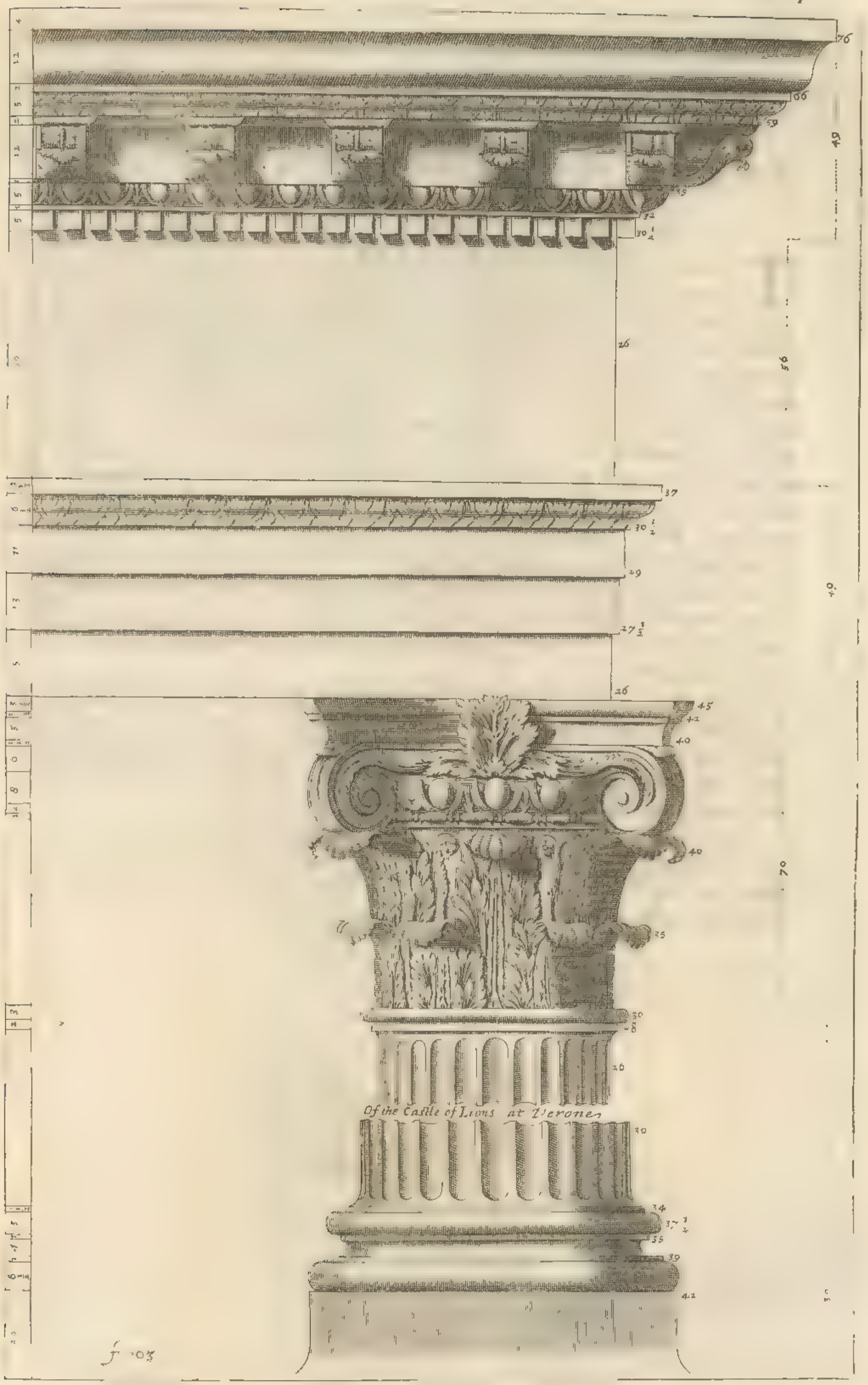
If theſe two Inſtances ſuffice not our *Reader*, he may make his Election of others more to his liking, or fix upon any of thoſe who beſt pleaſes him of the *Author's* following, which I have therefore expreſsly collected together, and amongſt which I acknowledge my particular eſteem for *Palladio*.

CHAP. V.

A Profile Compoſita *taken from the* Arco de Leoni *at* Verona.

BEfore I propoſe this *Compoſita* for *Model*, I ſhall firſt endeavour to prevent and elude certain Objections which our *Criticks* poſſibly raiſe, leſt they impute it to my Inadvertency ſhould I paſs them by in ſilence. The firſt is, that the *Cornice* is defective for want of the *Corona*. The other is the naked placing of the *Dentelli*, without any ſeparation on the *Freeze*. Thirdly, the exceſſive Height of the *Freeze*. And laſtly, that the three *Faces* of the *Architrave* are all inverted from the ordinary Poſition. And finally, that the *Plinth* of the *Baſe* is a great deal too high, being compared to the reſt. To all theſe *Objections* I might reply in a word; That in a Buſineſs of *Architecture* the reaſon is allowable, ſince I produce an antique Example, univerſally approv'd, and ſuch as this is: Beſides, I add, that the very name of *Compounded* ſeems to infer a kind of *Liberty*, and that therefore an *Architect* might ſometimes be juſtly permitted to take it, as occaſion may ſuggeſt, either by introducing into the *Order*, or retrenching from it what he thinks moſt conducible and proper to his *Deſign*; provided it be diſcreetly manag'd, as it has been judiciouſly obſerv'd in the *Profile*, where the *Author* being to make an extraordinary large *Freeze* for the more commodious placing of many *Figures* which concern'd his Subject, would ſpare from the *Cornice* what he had uſurped of more than the regular Proportion of the *Freeze* did permit him. To this purpoſe it was, he cut off and abated the *Corona*, though in truth a conſiderable Member, but which is yet (as far as I can collect from other Inſtances) not abſolutely neceſſary; ſince in the *Temple of Peace* at *Rome* (one of the moſt ſtupendious Works of *Antiquity*) the *Cornice*, though *Corinthian*, has no *Corona* at all, notwithſtanding that the *Architect* had the Field ſo open before him. And *L. Baptiſta Alberti* (whoſe Authority is greatly prevalent amongſt our modern Maſters) without any other reaſon for it, than that of his own *Guſto*, has given none to this *Corinthian Order*. Now as concerning the *Compartiment* of the *Swaths* and *Faſciæ* of the *Architrave*, whoſe Poſition here ſeems ſomewhat prepoſterous, 'tis (to ſpeak ſeriouſly) a little extraordinary, however I well remember to have ſeen others which were like it, and *Palladio* produces us one *Example* of it towards the end of his Fourth *Book*, taken from a *Temple* of *Polo* in *Dalmatia*, of the *Corinthian Order*, the *Architecture* whereof is exceedingly rare and antique; and there I alſo find that the *Baſe* of the *Column* hath a *Plynth* likewiſe of an exceſſive thickneſs, as indeed ours has, which ſupply the place of a *Zocolo*. Thus you have both *Reaſon* and *Example* ſufficient for the Anſwer of every Objection. But from hence one may alſo judge, that this *Profile* ſhould not be employ'd in Work without extraordinary Diſcretion, and indeed ſome kind of Neceſſity. That which I ſhall produce in the following Inſtance is more regular to Particulars, and by conſequence more agreeable to all ſorts of *Works*. But the general *Proportion* both of the one and other is ſufficiently equal. The *Column* itſelf has ten *Diameters*, and the Altitude of the *Entablature* amounts to a fourth part of the *Column*.

CHAP.


Of the Caſtle of Lions at Verona.

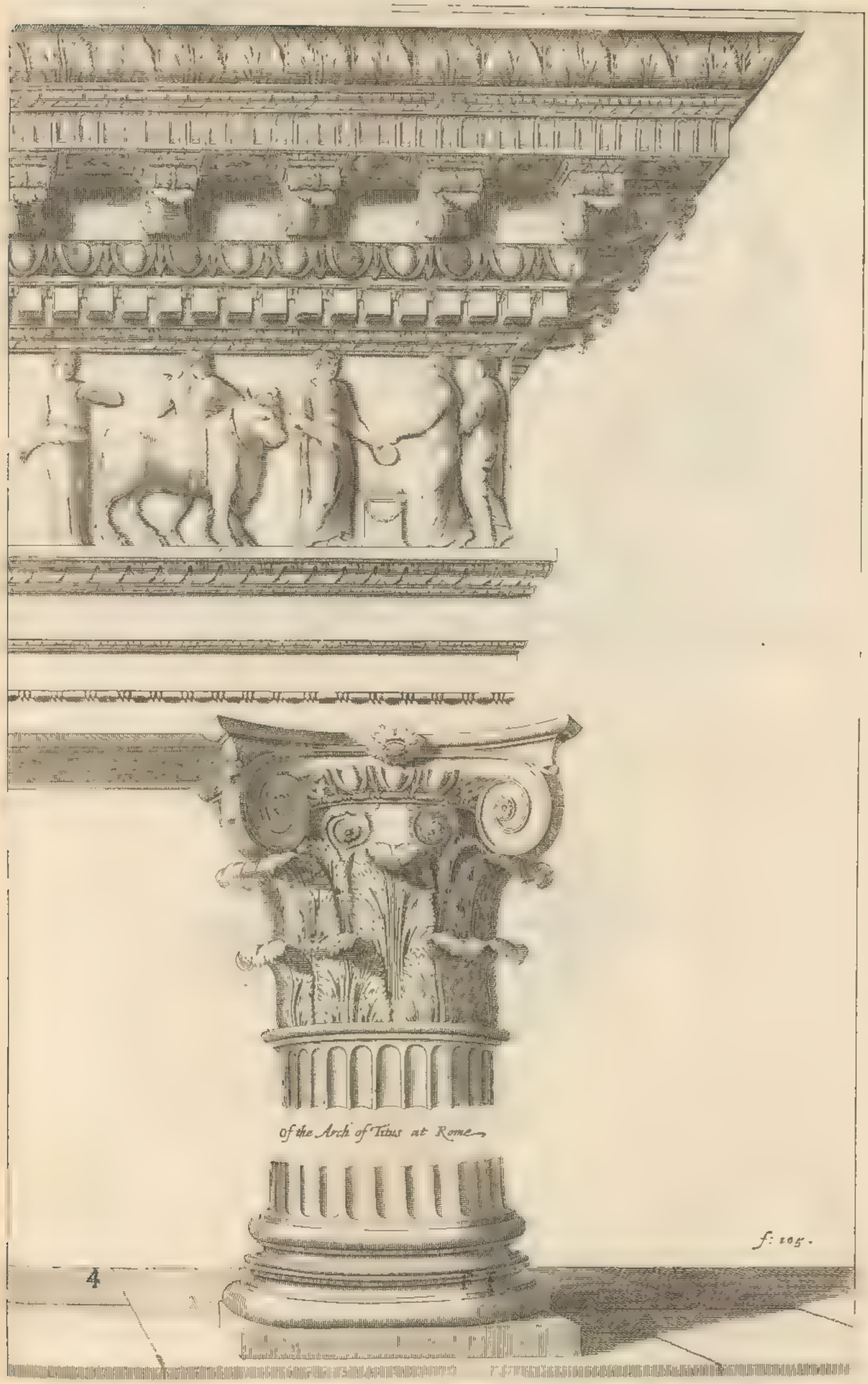
CHAP. VI.

A Profile of the Compoſita, *taken from the* Arch *of* Titus *at* ROME.

THE incomparable *Idea* of this *Compoſita*, and the Richneſs of its *Ornaments*, makes me conjecture that the *Inventer* thereof might poſſibly accompany *Titus* at the *Expedition* and *Siege* of *Jeruſalem*; and that it was *there* he had contemplated the divine *Architecture* of the *Temple* of *Solomon*, in imitation of which (though in a very ſlender *Copy*, compar'd to that miraculous *Edifice*, and eſpecially in a different *Order*) he would ſhew how ſtudiouſly he had conſider'd it. This Conjecture of mine has for its Foundation, that the *Triumphal Arch*, from whence I have drawn it, is the very ſame which they erected to the Glory of that *Emperour* at his return from that famous Enterprize: And the *Architect* who haply contriv'd the *Ordinance*, and the whole Preparation of the Day of *Triumph*, judiciouſly introduced into his Work (which was to make the moſt noble and laſting part of it) the *Figures* of the principal *Spoils* of the *Temple*, as that of the *Golden Candleſtick* with its ſeven *Branches*, which ſtood in the *Sanctuary*, and the *Golden Table* upon which was ſet the *Bread* of *Propoſition*, together with ſome other Utenſils to this Day extant in the Work.

Moreover, the *Arch* has this conſiderable amongſt others yet remaining of the *Antients*, that 'twas the firſt and very *Original* of this kind of Structure: and albeit there have been ſince made ſome more ſumptuous for greatneſs of Bulk and Magnificence, this is yet of a better Hand, and more exquiſite *Workmanſhip* than any of them.

I give you the *Elevation* in *Perſpective*, as well to gratifie the Curioſity of thoſe who affect this *Art*, as that I may alſo contribute ſomething to the Beauty of the *Deſign*; and beſides that ſuch as never ſaw the *Original*, may in ſome ſort judge of the *Effect* which it produces.



of the Arch of Titus at Rome.

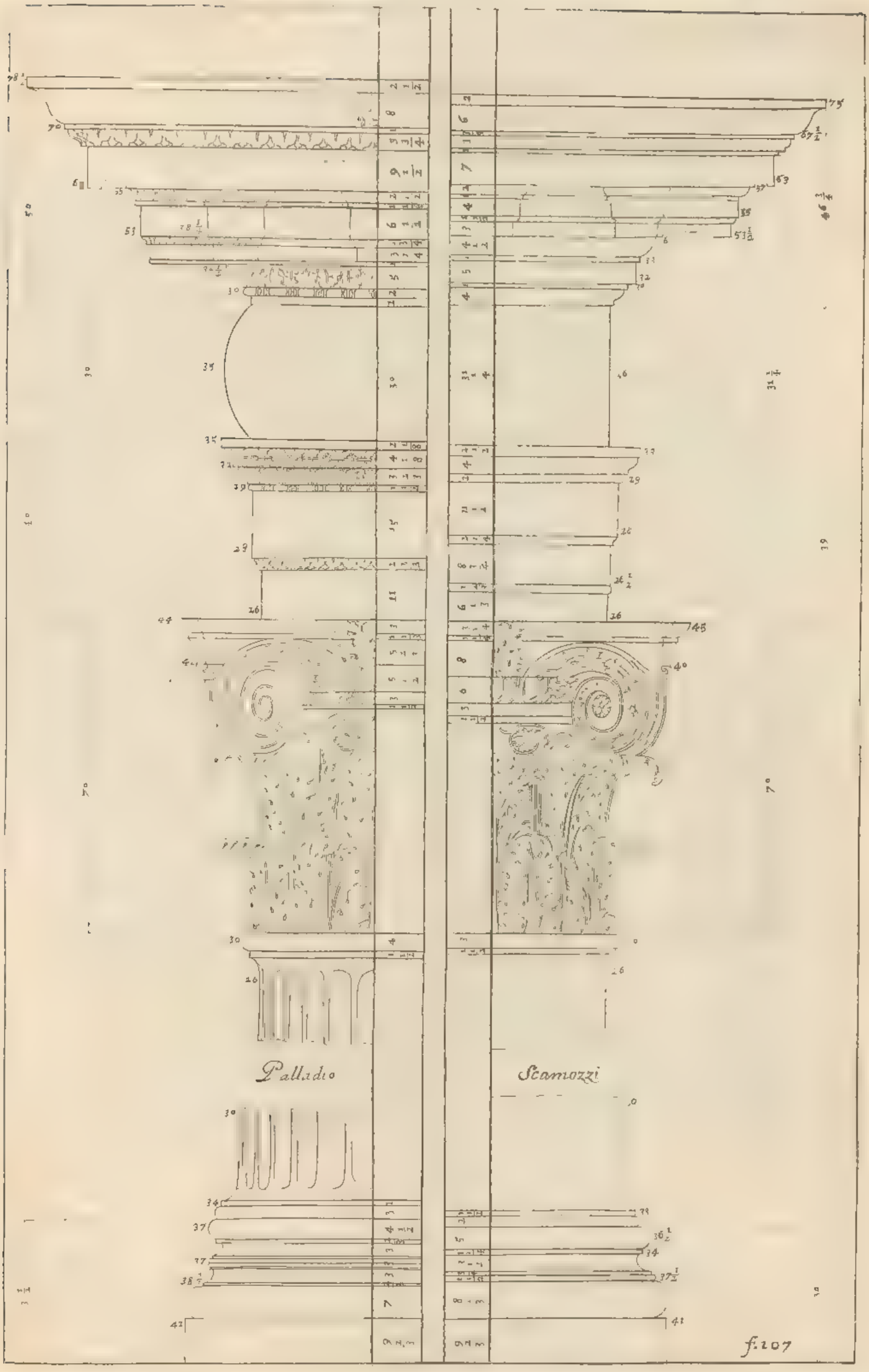
f: 105.

CHAP VII.

Palladio *and* Scamozzi, *upon the* Compoſita.

Andrea Palladio propoſing this *Profile* of the *Compoſita*, which he alſo names the *Latin Order* (to make it *ſpecifically* differ from ſome others which bears the ſame Appellation) gives us a general *Maxim* for its *Proportion*, which is to make it reſemble the *Corinthian*, the Form only of the *Capitel* excepted. And though he add that this *Order* ought to be ſomewhat more deck'd and gay than the *Corinthian*, 'tis to be underſtood in reference only to thoſe who allow the *Corinthian Column* but nine *Diameters* (as himſelf does) whereas this ſhould ever have ten.

Scamozzi's *Profile* has not ſo good a Grace as that of *Palladio*, nor is it indeed ſo exact in Regularity of its *Entablature* with the *Column*, where it wants but three *Minutes* upon the Total to make it preciſely a fifth: for though this be a very ſmall matter, yet ſince it had been better to have a little exceeded than come ſhort (the *Antients* commonly allowing a whole fourth, or at leaſt two ninths) the Defect is the more eaſily perceiv'd. But what is yet worſe, is, that in the Compoſition of the *Cornice* he has accumulated ſo many ſmall Members one upon the other, as renders it trifling and a little confuſed.


Palladio
Scamozzi
f. 107

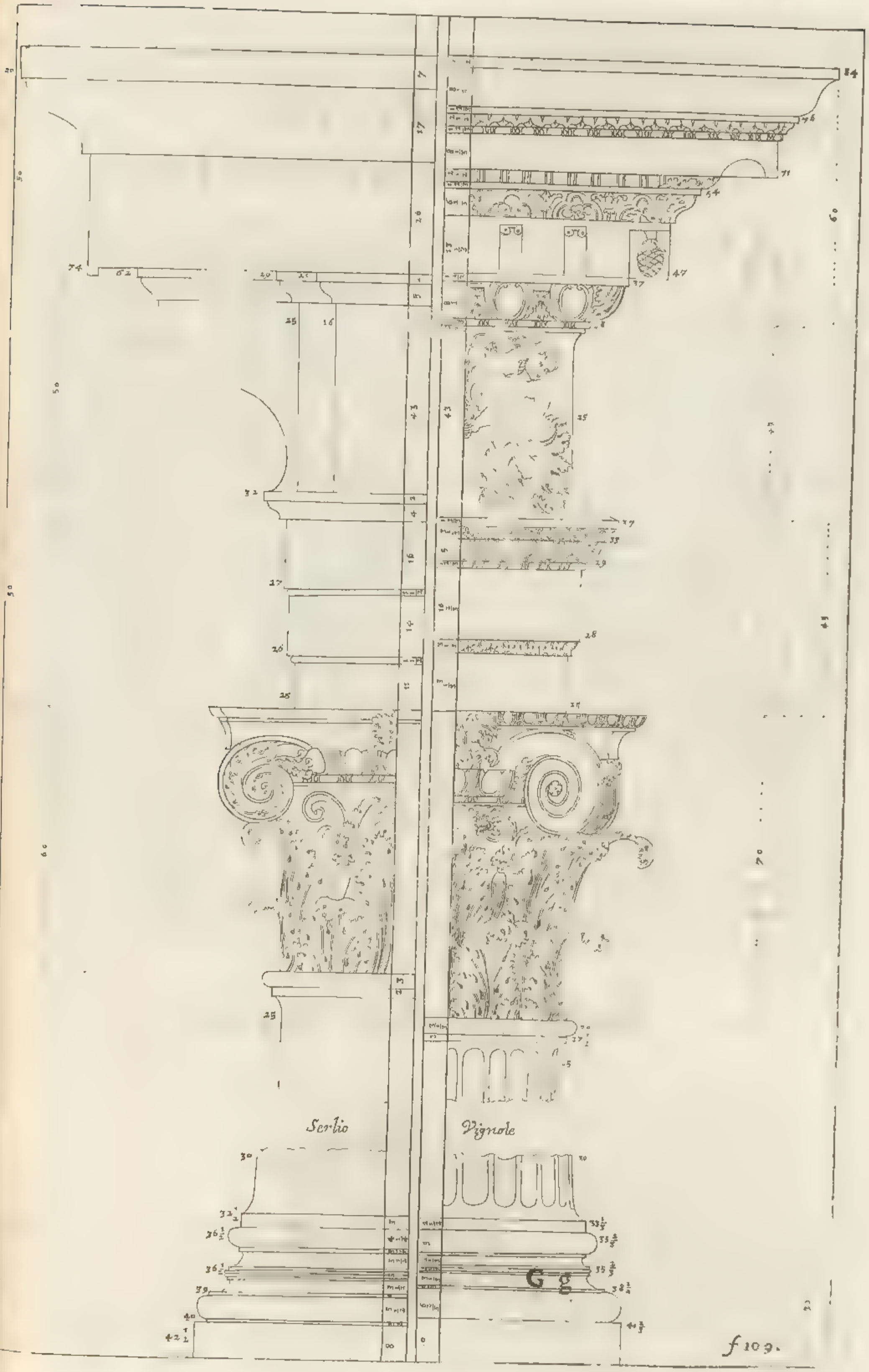
CHAP. VIII.

Serlio *and* Vignola, *upon the* Compoſita.

I Am aſtoniſh'd at this laſt Production of poor *Serlio*, who having till now reaſonably well conducted the firſt *Orders* of *Architecture* under the Direction and Government of *Vitruvius*, fails miſerably at the very Port juſt as his *Pilot* has deſerted him: And what does moſt of all ſurprize me, is, that the Man's *Genius* (which was to intimate a mean and trifling Manner) ſhould revolt in ſuch an inſtant, and change into ſo ſtrange an Exceſs. I was at firſt reſolved to have ſuppreſs'd this *Profile* (for the Credit of the Perſon) had it not been to wrong his Competitor *Vignola*, and ſo fruſtrate him of the great Advantage, which, upon this Occaſion, he has over him; ſince in the precedent *Orders* I have ſometimes conceived him his Inferiour. I ſhall not dwell long upon the Particulars, which in this *Compoſition* to me ſeem defective; becauſe I ſhall ſooner have finiſh'd in ſaying once for all, that there is nothing as it ſhould be, though the *Cornice* be taken from, and (as the *Author* pretends) follow'd ſtroak for ſtroak after that of the fourth *Order* of the *Coloſſeum*, which is indeed one of the moſt renown'd *Veſtigia's* of *Antiquity*, and an admirable Piece of *Architecture*. But one had need of a very ſteddy Head to be able to climb ſuch an Height without ſhaking ones judgment. He ſhould have conſider'd, that this *Coloſſean* Structure being a *Maſs* of a prodigious Altitude, had need of ſome *Sophiſtications* from the *Opticks*, to make it appear regular to the Eye; and that therefore there would be an Error and Miſtake in ſumming up the Dimenſions and *Æquipondium* of its Members at a more moderate Diſtance with the ſame Meaſures and Proportions. This Inadvertency has made him ſlip into another Fault much more groſs and unpardonable; for he places upon a ſmall and pitiful *Capitel* (after his own Mode) the whole weight of the *Coloſſeum*, that is to ſay, a *Gigantick Entablature*, which compoſes the *Corona* of this prodigious Edifice. This ſo monſtrous a Medly appears more here than in the *Author*; becauſe he has deſign'd it very ſlightly, and in ſo ſmall a Volume (in his fourth *Book* and ninth *Chapter*, where he explains this laſt *Order*) that one can hardly diſcern the Form of the principal Members.

Vignola has proceeded with a great deal more exactneſs and judgment in his *Deſigns*, which he has alſo *Profil'd* very neatly, and in a large *Volume*, that renders it commendable and of uſe to *Workmen*. He allows in this *Compoſition* the ſame Meaſures and Proportions that he does to the *Corinthian*.

CHAP.



f 109.

CHAP IX.

Of a certain Ornament *called the* Frette.

Architecture is in all this *Treatise* so extremely jealous of those *Libertines* that have the rashness of daring to corrupt the Forms of her *Profiles* by their capricious *Inventions*, that she even refuses entrance to all kind of *Novelty* whatsoever. This it is which has put me in mind of the promise I made to present you here with some extraordinary *Designs* of *Capitels* drawn from the *Antiques:* But considering that they can serve for no use in any sort of Structure at present, as being only proper for the *Pagan Deities*, and that we have now no more *Jupiters*, *Neptunes*, or other *Gods* of that Age, for whose *Temples* these kind of *Capitels* were singularly appropriated, by Representations *specifical* to every *Subject*; I conceiv'd it better to remove those *Baits* which serv'd likewise but to awaken the ill *Genius* of our *Workmen*, to imitate and copy after them. To supply then their places with some other thing which should be profitable and without reproach, I have made a very curious and rare Collection of a certain *Ornament*, which they call the *Frette*, and of which the *Antients* made great use; taking infinite Delight in composing variety of sorts, as this Design will shew you. This *Ornament* consists in a certain *interlacing* of two *Lists*, or small *Fillets*, which run always in *parallel* Distances equal to their Breadth; with this necessary condition, that every Return and Intersection, they do always fall into *right Angles*; this is so indispensable, that they have no *Grace* without it, but become altogether *Gothick*. There is one (amongst the *ten* I here present you) that consists but of a single *Fillet*, which nevertheless fills its Space exceedingly well, and makes a very handsome show. The *Antients* did ordinarily apply them upon even and flat *Members*, as upon the Face of the *Corona* and *Eves* of a *Cornice* under the *Roofs*, *Planceres* and *Ceilings* of *Architraves*; also about the *Doors*, and on the *Plinths* of *Bases*, when their *Torus* and *Scotia's* were carv'd; also they do rarely about *Platfonds* and upon *Ground Works*.

The End of the SECOND PART

f. 111

AN ACCOUNT OF ARCHITECTS AND ARCHITECTURE,

TOGETHER,

With an Hiſtorical, Etymological Explanation of certain

TERMS, particularly Affected by

ARCHITECTS.

Much Inlarg'd and Improv'd, ſince the former Impreſſion.

By *JOHN EVELYN*, Eſq;
Fellow of the ROYAL SOCIETY.

TOGETHER,

With *LEON BAPTIST ALBERTI*,

OF

STATUES.

LONDON: Printed in the Year, 1723.

TO

My moſt Honoured Friend,

Sir *CHRISTOPHER WREN*, K^t.

Surveyor of His Majeſty's Buildings and Works.

SIR,

THAT I take the Boldneſs to Adorn this *Little Work*, with the Name of the *Maſter* of the *Works*, (whoſe Patronage alone can give it Reputation) I have no Excuſe for; but an Ambition of Publickly Declaring the great Eſteem I have ever had of Your Vertues and Accompliſhments, not only in the *Art* of *Building*, but through all the learned *Cycle* of the moſt *Uſeful* Knowledge and *Abſtruſer Sciences*, as well as of the moſt Polite and Shining: All which is ſo juſtly to be allow'd You, that You need no *Panegyric*, or other *Hiſtory* to Eternize them than the *greateſt City* of the *Univerſe*, which You have *Rebuilt* and *Beautified*, and are ſtill improving: Witneſs the *Churches*, the Royal *Courts*, Stately *Halls*, *Magazines*, *Palaces*, and other Publick Structures; beſides what You have Built of Great and Magnificent in both the *Univerſities*, at *Chelſey*, and in the Country; and are now advancing of the *Royal Marine Hoſpital* at *Greenwich*, *&c.* All of them ſo many Trophies of Your Skill and Induſtry, and Conducted with that Succeſs; that if the whole *Art* of *Building* were loſt, it might be *Recover'd* and *found* again in St. *Paul*'s, the *Hiſtorical Pillar*, and thoſe other Monuments of Your Happy Talent and extraordinary *Genius.*

I have named St. *Paul*'s, and truly, not without Admiration, as oft as I recall to Mind (as frequently I do)

I do; the ſad and deplorable Condition it was in, when (after it had been made a *Stable* of *Horſes*, and a *Den* of *Thieves*) You, (with other Gentlemen, and my ſelf) were by the late *King Charles*, nam'd *Commiſſioners* to Survey the *Dilapidations*, and to make Report to His *Majeſty*, in order to a ſpeedy *Reparation*: You will not, I am ſure, forget the *Struggle* we had with ſome, who were for patching it up any how, (ſo the *Steeple* might ſtand) inſtead of New-Building, which it altogether needed: When (to put an End to the Conteſt) five Days after, that *Dreadful Conflagration happen'd*, out of whoſe *Aſhes* this *Phœnix* is Riſen, and was by *Providence* Deſign'd for You: The *Circumſtance* is too *Remarkable*, that I could not paſs it over without Notice. I will now add no more, but beg Your Pardon for this Confidence of mine; after I have acquainted You, That the *Parallel* (to which this was Annexed) being out of Print, I was Importun'd by the *Book-Seller*, to add ſomething to a *New Impreſſion*; but to which I was no way inclin'd, 'till not long ſince, going to St. *Paul*'s, to Contemplate that *Auguſt Pile*, and the Progreſs You have made, ſome of Your *Chief Workmen*, gratefully acknowledging the Aſſiſtance it had afforded them; I took this Opportunity of doing my ſelf this Honour, who am,

27 *Aug.* 2 *Sept.* 1666.

SIR,

Wotton. 21. *Feb.* $169\frac{6}{7}$.

Your moſt Humble Servant,

J. EVELYN.

To

TO THE

READER,

THE Author *of the* Parallel *of the Antient Architecture* with the *Modern*, (which many Years since I made *English*) *had at the end of his* Treatise *begun to explain a few of the hard Words*, Technical Terms *belonging to the* Art; *the* Etymologies *whereof he thought necessary to interpret: And, as I said, they are but a few indeed, compared to those which remain, about a* Dozen *at the most*; *nor was it necessary he should exceed that number, in a* Country *where* Workmen *are generally more intelligent in the proper Expressions of the* Terms *of the* Arts *unto which they addict themselves, than ours for the most part are*; *and therefore, if waving the formal Translation of that* Page (*for it exceeds very little more*) *I have in lieu thereof considerably enlarg'd upon this Occasion, by a more finish'd and compleat enumeration of the several* Parts *and* Members *of the* Orders, *as they gradually succeed one another in* Work, *illustrated with more full and exact* Definitions (*than by any has yet been attempted for the Benefit of our* Countrymen.) *I hope my Adventure may find both Pardon and Acceptance. Nor let any Man imagine we do at all obscure this Design by adorning it with now and then a refin'd, and* Philological *research*; *since whilst I seek to gratify the Politer* Students *of this Magnificent* Art, *I am not in the least disdainful of the lowest Condescentions, to the Capacities of the most Vulgar Understandings*; *as far at least as the Defects, and Narrowness of our* Language *will extend, which rather grows, and abounds in Complemental and Impertinent* Phrases, *and such froth* (*as Sir* H. Wotton *well observes from* Gualterus Rivius's *incomparable Version of* Vitruvius *in the* German Tongue, *and is now so far out-done by the Learned* Perault) *than in the solid Improvements of it*; *by either*

preſerving or introducing what were truly needful: And really, thoſe who are a little Converſant in the Saxon *Writers, clearly diſcovered by what they find Innovated, or now grown Obſolete, that we have loſt more than we have gain'd; and as to* Terms *of useful* Arts *in particular, forgotten and loſt a World of moſt apt and proper Expreſſions which our Forefathers made uſe of, without being Oblig'd to other* Nations: *And what care the* French *have taken upon this Account only, may in part be judged from that pretty, though brief* Eſſay des Merveilles de Nature, & des plus Nobles Artifices, *&c. but eſpecially by the late* Dictionaries, *wherein the proper* Terms *of the moſt* Vulgar, *as well as more* Poliſh'd *Arts are Induſtriouſly delivered, whilſt (to ſpeak Ingenuouſly) I find very little Improvement in the moſt Pretending* Lexicons *and* Nomenclators *yet Extant; that of* Bernardinus Baldus *only upon* Vitruvius *excepted; which yet is neither after my* Method, *nor for our* Workmens *turn, being a Book of* Price, *and written in the moſt* Learned *Tongue. It is a very great* Deficient *indeed, and to be deplor'd, that thoſe induſtrious* Compilers *did make it no more their Buſineſs to gratifie the World with the Interpretation of the* Terms *of ſo many uſeful* Arts, *I mean the* Mechanical: Adrianus Junius *has deſerved well on this Occaſion, to his great Commendation; and much it were to be Wiſhed, that ſome Univerſal and Practical* Genius *would conſummate what he has ſo happily begun, and that not only in the* Arts Illiberal (*as they are diſtinguiſhed*) *and things* Artificial; *but furniſh us likewiſe with more exact Notices of the ſeveral and diſtinct* Species *of* Natural Things; *ſuch as are the* True *Names of* Birds, Fiſhes, Inſects, Stones, Colours, *&c. in which divers Worthy* * *Members of the* Royal Society, *have already made ſo conſiderable a Progreſs; ſince it is then, and not till then, our* Lexicons *will have arrived to their deſired Perfection, and that Men will be taught to ſpeak* (*like* Orators *indeed*) Properly *on all* Subjects, *and obliged to Celebrate their Labours.*

J. EVELYN.

* Mr Willoughbie, D. D. Merrel, Charleton, Waller, Ray, &c. And Mr Harris in his more moſt uſeful Lexicon Technicum.

AN ACCOUNT OF *ARCHITECTS and ARCHITECTURE,*

TOGETHER

With an Hiſtorical, and Etymological Explanation of certain TERMS *particularly Affected by* ARCHITECTS, *&c.*

THE Knowledge of this Sumptuous, Magnificent and Uſeful *Art*, for having been firſt deriv'd to us from the *Greeks*, we ſhould not without infinite Ingratitude either ſlight, or innovate thoſe *Terms* which it has pleaſed them to Impoſe upon the particular *Members* and *Ornaments* belonging to the ſeveral *Orders*; and that as well for the Veneration which is due to *Antiquity*, as that by Comprehending the Signification of them, we may with the more Facility and Addreſs, attain to the Intelligence and Genuine Meaning of what the *Maſters* in this *Profeſſion* have deliver'd to us in their ſeveral Writings and Works; not to inſiſt upon (what is yet not to be deſpis'd) the Decorum of ſpeaking *Properly*, in an *Art* which the greateſt *Princes* and *Potentates* of the *Earth*, have Vouchſafed to Honour by ſo many Signal and Illuſtrious Monuments, as do to this Day conſecrate their Memories to Poſterity.

Since the *Agent* does always precede the *Action*, and the *Perſon* or *Workman* is by Natural Order before his *Work*; we are by an *Architect* to underſtand, *A Perſon Skilful in the Art of Building*: The Word is Ἀρχιτέκτων a Compound in the Original, and ſignifies *Fabrum præfectus*, or if you will, *Informator*, which the *Preſident*, *Superintendent*, or *Surveyor* of the *Works* does fully expreſs; his Ἀρχὴ being relative to the *Fabri* that are under him, as the *Operæ* or *Labourers* are Subſervient to them. *Architect.*

Budæus calls him, *Structorum Princeps*; and ſuch a Perſon as is capable of rendring a Rational, and Satisfactory Account of what he takes in Hand. *Ratiocinatio autem eſt, quæ res fabricatas ſolertia, ac ratione proportionis demonſtrare atque explicare poteſt. Vitr.* l. 1. c. 1. So our *Maſter*; and ſuch a one it ſeems was that *Philo* the *Athenian* Architect, of whom the Orator, *Neque enim ſi Philonem illum Architectum, qui Athenienſibus Armamentarium fecit, conſtat perdiſerte populo rationem operis ſui reddidiſſe, exiſtimandum eſt Architecti potius ar-*

artificio disertum, quam Oratoris fuisse, de Orat. 1. Seeing his Knowledge and Ability in this Faculty did not at all Eclipse and Diminish his Eloquence and other excellent Parts, but rather added to them; and this I urge to shew that it was no mean thing for a Man to arrive to the Talents of an accomplish'd *Architect*; as he that shall take his *Character* out of *Vitruvius* will easily conclude; *Itaque Architecti* (says he) *qui sine literis contenderunt, ut manibus essent exercitati, non potuerant efficere ut haberent pro laboribus Authoritatem*; as if *Hands* could do little in this *Art* for their Credit without *Letters*: Nay, so Universal will this great *Dictator* have him; that in those *Duodecim necessaria*, he sums up no less than *Twelve* rare *Qualities* which he would have him furnish'd withal; *Itaque eum & Ingeniosum*, &c. I will but only touch them: 1. He must be *Docil* and *Ingenious*. 2. He must be *Literate*. 3. Skilful in *Designing* and *Drawing*. 4. In *Geometry*. 5. *Opticks*. 6. *Arithmetick*. 7. *History*. 8. *Philosophy*. 9. *Musick*. 10. *Medicine*. 11. Nay, in *Law*; and 12. *Astrology*; and really, when (as in the following Chapter) he there assembles his Reasons for all this, you will be both satisfied with them, and Justifie his Curiosity. Not that an *Architect* is obliged to be an Accurate *Aristarchus* in *Grammar*, or an *Aristoxenus* in *Musick*, an *Appelles* or a *Raphael* for *Designing*; in sum, an exact *Professor* in all these Faculties, *sed in his non Imperitus*: Sufficient it is he be not totally a Stranger to them; since without *Letters* he cannot consult with *Authors*: Without *Geometry* and the *Graphical* Arts, he will never be able to measure out, and cast the *Area*; draw the *Plot* and make the *Scale*: Being Ignorant of the *Opticks* he can never well understand the due placing of his *Lights*, Distance, Magnitude and Dimensions of *Ornaments*: By the assistance of *Arithmetick* he Calculates the Proportions of the several *Orders*, sums up his *Accompts*, and makes an Estimate of the Charge: Being Read in *History* he comes to Discourse of the Reasons, and Original of many particular *Members* and Decorations, the Height, Improvement, and Decay of this *Art*; why the *Greeks* instituted the Order of the *Caryatides*, and the *Persian Entablatures* were supported by *Slaves*; how the *Corinthian* Capitels came to be adorn'd with *Foliage*, the *Ionic* with a Matron-like *Voluta*, &c. By the study of *Philosophy* he arrives to the Knowledge of Natural Things, and is able to discern the quality of the *Elements*, and the Materials which he makes use of: From some Insight in *Medicine* he can Reason of the Temperature and Salubrity of the *Air*, and Situation: *Musick* will assist him in contriving how in *Churches*, *Tribunals* and Publick *Theatres*, Men may with best Advantage hear the *Preachers*, *Magistrates* and *Actors* Voices: Without some Tincture in the *Laws*, he cannot be secure of his *Title*; and being wholly Ignorant of *Astrology*, Position and Influences of the *Celestial Bodies*, the *Days*, *Winds*, *Weather*, *Equi-*

noxes

noxes, and Course of the Heavenly *Orbs* (as to Bruits) pass over without Observation, Benefit, or Prevention of their Effects. To this Purpose (though much more at large) *Vitruvius*: But by this you may see how necessary it is, that an accomplish'd *Master-Builder* should be furnish'd beyond the Vulgar, and I have been the longer in the Repetition, not only that I may advance his Reputation, and for Encouragement; but to shew that in the proper Notion (and as the great *Plato* has somewhere design'd him) *Nullus Architectus utitur manuum Opera, sed utentibus præest.* An Architect is not to be taken for the commonly illiterate *Mechanick* (which may bring it into Contempt) but for the Person who *Superintends*, and *Presides* over him with so many Advantages: Yet neither is this to the Dishonour of the meanest of those Excellent *Workmen*, who make use of their *Hands* and *Tools* in the grosser Materials, since *God* himself, and *Nature*, the Universal Builders, are by *Translation* truly styl'd *Architects*, both as to what they have excogitated so wisely, and wrought so Artificially.

Dial. de Regno. *See also his* Philebus.

Be this then spoken of the *Superintendent* in particular, whom for Distinction sake and the Character assign'd him we may name *Architectus Ingenio*: For since to the Perfection of an accomplish'd Building there were three *Transcendencies* required: 1. *Strength*, 2. *Utility*, and 3. *Beauty*, for the apt *Distribution*, *Decor* and Fitness, *Symmetry* and Proportion; there was likewise necessary as many Capacities; and that besides the judicious *Head* there should be a Skilful *Hand*, to which let us add, *Architectus Sumptuarius*, a full and overflowing *Purse*: Since he who bears *this* may justly be also stiled a *Builder*, and that a *Master one* too; as being the Person at whose Charge, and for whose Benefit the *Fabrick* is erected; and it is indeed the *primum mobile* which both begins, and consummates all designs of this Nature; for if that ingredient come once to fall short, Men build their *Monuments*, instead of their *Houses*, and leave Marks of Dishonour for *Tables* of Renown, *Homo iste cæpit ædificare & nequivit perficere*, Tis Man began to Build, and was not able to finish. Yet thus have I known some Excellent Persons abus'd; who trusting to the Computation of either Dishoneſt, or Unskilful *Artists*, have been forc'd to desist, sit down by the Loss, and submit to the Reproach: But so it seems would not the *Greeks* suffer themselves to be Over-reach'd; when those great Builders of the *Ephesians* (who knew sufficiently what a Mischief it was to the Publick, as well as Private Men) ordain'd it for a Law; That if a *Clerk* undertook a *Work*, and spent more than by his Calculation it amounted to, he should be obliged to make it good out of his own Estate; whilst they most Liberally and Honourably rewarded him, if either he came within what was first design'd, or did not much exceed it. And this was esteem'd so reasonable (upon consideration how many Noble

See 21. Eccles. 8.

Vitr. *in* Præf. *lib.* 10.

Perſons had been undone, and Magnificent *Structures* left Imperfect) that *Vitruvius* writing to the great *Auguſtus* concerning this Subject, wiſhes the ſame Conſtitution were in force at *Rome* alſo: But thus I have done with our *Architectus Sumptuarius*. I come to the

2 Reg 12 7.

Manuarius, the third and laſt, but not the leaſt of our *Subſidiaries*; for in him I comprehend the ſeveral *Artizans* and Workmen, as *Maſons*, *Stone-cutters*, *Quarry-men*, *Sculptors*, *Plaſterers*, *Painters*, *Carpenters*, *Joyners*, *Smiths*, *Glaziers*, and as many as are neceſſary for carrying on of a *Building* till it be arriv'd to the Perfection of its firſt *Idea*. But tho' it is not (as I ſaid) expected that theſe ſhould trouble themſelves with much Learning, or have any thing to do with the Accompliſhments of our *Maſter Superintendent*: Yet, ſince an Exact and Irreproachable Piece of *Architecture* ſhould be κολοφων *totius Matheſeos*, the Flower, and Crown as it were of all the *Sciences Mathematical*, it were infinitely deſirable that even every Vulgar *Workman* whoſe Calling is Converſant about *Building*, had attained to ſome Degree of competent Knowledge in the more eaſy and uſeful Principles of thoſe *Lineary Arts*, before they were admitted to their *Freedom*, or employed in Deſigns of Moment. And truly, if a thorough Inſight of all theſe (as undoubtedly they are) be neceſſary to a good *Artiſt*; I know no Reaſon but ſuch a Perſon (however it hath pleaſed our *Univerſities* to Employ and Decree their *Chairs*) might with very juſt Reaſon be alſo numbred *inter liberalium diſciplinarum Profeſſores*, and not thruſt out as purely *Mechanical*, *inter opificis*, a Converſation hitherto only admitted them; as if *Talking*, *Speculation* and *Theories*, were Comparable to uſeful *Demonſtrations* and *Experimental Knowledge*; in a Word, the very *Name* imports an Excellency above other Sciences; ſo as when the * *Orator* would Expreſs a Superiority above them, for its vaſt Extent and Comprehenſion; he mentions *Architecture* with the *Firſt*, diſtinct from the *Illiberal*: Great Pitty then I ſay it is, that amongſt the *Profeſſors* of *Humanity* (as they call it) there ſhould not be ſome *Lectures* and *Schools* endowed and furniſh'd with *Books*, *Inſtruments*, *Plots*, *Types* and *Models* of the moſt excellent Fabricks both in *Civil* and *Military Architecture*, where theſe moſt Noble and Neceſſary *Arts* might be Taught in the *Engliſh* and Vulgar Tongue, retriev'd to their proper and Genuine Significations; and it is to be hoped, that when his *Majeſty* ſhall perfect his Royal *Palace* of *White-Hall* according to the Deſign, he will in Emulation of thoſe Heroes, *Francis the Firſt*, *Henry the Fourth*, *Coſimo de Medices*, the *Dukes* of *Urbin*, *Richlieu*, and other Munificent Spirits, Deſtine ſome *Apartments* for the Eaſe and Encouragement of the ableſt Workmen in *this*, as in all other *uſeful*, *Princely* and *Sumptuous* Arts: I mean for *Printers*, *Painters*, *Sculptors*, *Architects*, &c. by ſuch Liberal *Honoraries* as may draw them from all Parts of the World to Celebrate his *Majeſty* by their Works to Poſte-

* *Office L. 2.*

Poſterity, and to Improve the Nation ; From ſuch a Bounty and Proviſion as *this* it appears to have been, which made *Vitruvius* to leave us thoſe his incomparable Books, that we have now enjoy'd for ſo many Ages ; for ſo he acknowledges it to the Great *Auguſtus*, *Cum ergo eo beneficio eſſem Obligatus, ut ad exitum Vitæ non haberem inopiæ timorem*, &c. Vitruv. in præfat. ad Lib. 1.

I might upon this Occaſion ſpeak ſomething here concerning the *Matter* and *Form* of Buildings, which after the *Perſons* who undertake them, are their moſt Solid and Internal *Principles* ; but I purpoſely paſs them over at preſent, becauſe they do not properly belong to this Diſcourſe, but to ſome more intire Treatiſe of the whole *Art* than is yet extant amongſt us, and to be delivered by ſome Induſtrious Perſon who ſhall oblige the *Nation* with a thorough Examination of what has already been written by *Vitruvius* l. 2. c. 3. ad 9. *Palladio* 1. c. 2. *Leon Alberti* l. 2. c. 45, 46. *Don Barbaro* l. 11. Sir *H. Wotton* in his Conciſe and uſeful *Theorems*, *Deſgodes*, *D'Avilar*, *Perault*, *Blondel*, and others ; and in what ſhall be found moſt Beneficial for our *Climate* ; it were I ſay, becoming our great Needs that ſome Ingenious Perſon did take this in Hand, and Advance upon the *Principles* already eſtabliſh'd, and not ſo Acquieſce in them as if there were a *Non Ultra* Engraven upon our *Columns* like thoſe of *Hercules*, after which there remained no more to be diſcovered ; at leaſt in the Apprehenſion of our Vulgar Workmen, who for want of ſome more ſolid Directions, Faithful and eaſy Rules in this Nature, fill as well whole *Cities* as *Private Dwellings* with Rubbiſh and a thouſand Imfirmities, as by their want of Skill in the Profeſſion, with the moſt ſhameful Incongruities and Inconveniencies in all they take in Hand ; and all this for want of *Canons* to proceed by, and *Humility* to learn ; there being hardly a Nation under Heaven more conceited of their Underſtandings and Abilities, and more impatient of Direction than our Ordinary *Mechanicks* : For let one find never ſo juſt a Fault with a *Workman*, be the ſame of what *Myſtery* ſoever, immediately he ſhall reply, *Sir*, I do not come hither to be Taught my *Trade*, I have ſerv'd an *Apprenticeſhip*, and have wrought e're now with *Gentlemen* that have been ſatisfied with my Work, and ſometimes not without Language of Reproach, or caſting down his Tools, and going away in Wrath ; for ſuch I have frequently met withal. I do not ſpeak this to diminiſh in the leaſt from the Capacity and Apprehenſion of our *Nation* who addict themſelves to any of the moſt Polite and Ingenious *Profeſſions*, but to Court them to more Civility, and to Humble the Ignorant : For we daily find that when once they arrive to a thorough Inſpection and Addreſs in their *Trades*, they Paragon, if not Exceed even the moſt Exquiſite of other Countries, as we may ſee in that late Reformation and Improvement of our *Lock-Smiths* work, *Joyners*, *Cabinet-makers* and the like, who from very

Vulgar

Vulgar and Pitiful *Artists*, are now come to Produce *Works* as Curious for the *Filing*, and admirable for their Dexterity in *Contriving*, as any we meet with abroad, and in particular to our *Smiths* and *Joyners*, they Excell all other Nations whatsoever.

But as little Supportable are another sort of *Workmen*, who from a good Conceit of their Abilities, and some Lucky *Jobb* (as they call it) do generally Ingross all the Work they can hear of, while in the mean time they Disdain almost to put their own Hands to the *Tool*, but for the most part employ their *Apprentices*, or some other Ignorant *Journey-men*; as if the Fame of their *Masters* Abilities did any thing contribute to the well Performance of Work undertaken, whilst in the interim *He* hardly appears himself till all the Faults be slubber'd over, the Remedy either impossible or expensive, and our *Master* ready to receive his Money, which such *Gentlemen Mechanicks* commonly consume on Ease and Bravery, being puffed up with an empty Conceit of their own Abilities, which (*God* knows) is very Indifferent, and the less for want of Exercise and Humility: A Practice contrary to the Usage of all other Nations, that even such as by their Knowledge in this Kind, have Meritoriously attained to the Titles of *Military* Dignity, have notwithstanding pursued their Employments and Callings in Personal Cares and Assiduous Labours, to their eternal Fame so long as one Stone shall lie upon another in this World, as I could abundantly exemplifie in the Works of *Cavalieri Fontane*, *Bramanti*, *Sansovino*, *Baglione*, *Bernini*, *Fiamingo*, &c. whose egregious Labours, both before, and since the Accumulation of their Honours, do sufficiently justifie what I report concerning them. And that all such may know I reproach no Man out of Spleen or the least Animosity to their Persons (for such as are not Guilty will never be offended at my Plainness, or take this for a *Satyr*) I cannot but exceedingly Redargue the want of more Acquaintance in these so necessary and becoming *Arts* even in most of our *Nobility* and *Gentry*, who either imagine the Study of *Architecture* an absolute *Non-necessary*, or Forsooth a Diminution to the rest of their *Education*, from whence proceeds that miserable loss of so many irrecoverable Advantages during their *Travels* in other *Countries*, as appears at their return; whereas if they were truly considered, there is nothing which does more properly concern them, as it Contributes to their external Honour, than the Effects of this Illustrious *Art*: Besides, these being Persons of better Parts, are most likely to be furnish'd with the best Abilities to learn, and so consequently enabl'd to examine, and direct such as they shall set on Work, without reproach either to their Conveniency or Expence when they at any time Build, not forgetting the Ornament and Lustre which by this means Rich and Opulent Structures do add to the *Commonwealth*; there remaining at this Day no one particular, for which

which *Egypt*, *Syria*, *Greece*, nay *Rome* her ſelf (beheld in all their *State*, *Wiſdom* and *Splendor*) have been more admir'd and celebrated, than for the *Glory*, *Strength* and *Magnificence* of their Incomparable *Buildings*; and even at preſent, the moſt noble *Youth* of *Italy* are generally ſo well furniſh'd with Inſtructions touching this Laudable *Art*, that the Knowledge of *Architecture* (and to ſpeak properly in its *Terms*, *&c.*) is univerſal, and ſo cheriſh'd, even in Men of Obſcure extraction, that (as is already inſtanc'd) *Architects* (I mean the *Manuary* as well as *Ingeniary*) have been, and are yet often rewarded with *Knighthood*, and the *Art* profeſs'd as a moſt becoming and neceſſary Accompliſhment in divers of their *Academies*: Add to this the *Examples* of ſo many great and illuſtrious Perſons as (without mentioning thoſe our *Maſter* has recorded in the *Preface* to his ſeventh Book) I might here bring upon this *Theatre*, famous for their Skill and Encouragement of this Sumptuous Art: *Emperours*, *Kings*, *Popes*, *Cardinals* and *Princes* innumerable, who have all of them left us the permanent Monuments of it in the ſeveral places of their Dominions, beſides the infinite Advantage of well managing of great and *Publick* Expences, as well as the moſt *Private* and *Oeconomical*, an handſom and well contriv'd Houſe being built at a far leſs Charge, than commonly thoſe irregular *Congeſtions*, rude and brutiſh Inventions, which generally ſo deform and incommode the ſeveral Habitations of our *Gentry* both in *City* and *Country*.

But I have done, and I hope all that love and cheriſh theſe *Arts*, and particularly that of *Architecture*, will not be offended at this *Zeal* of mine in beſpeaking their Eſteem of it; ſince if I have ſaid any thing in Reproof of the *Errors* either of the *Perſons* who pretend to it, or of the *Works* which they do to its Diſgrace; I have only ſpoken it that both may be reformed and made the better. But leaſt whilſt I thus diſcourſe of the *Accompliſhments* of our *Artiſts*, and defects of the *Pretenders*, I my ſelf be found *Logodædalus*, and as they ſay, *Architectus Verborum* only, I proceed from the *Perſon* to the *Thing*.

Architecture, conſider'd as an *Art*, was doubtleſs (as all others were) very Mean and Imperfect at firſt; when from dark *Caverns*, hollow *Trees*, deſpicable and ſorry Hovells and *Cabanes*, made with their rude Trunks, cover'd with Sods of Turf or Sedge, to protect themſelves from the Injuries of the Weather, and Wild-Beaſts (as at preſent Savage People do) Men liv'd not much better Accommodated, than Beaſts themſelves, wandering from Place to Place; either to Hunt, and in queſt of Food, or to find Paſture; where like the *Nomades*, with little Care or Labour, they make them *Huts* again, to ſhelter themſelves as before; till coming into ſome more Fertile and Fruitful Country, and finding no more neceſſity of ſtraying farther, or removing ſo often; they then 'tis likely begun to Build more Subſtantially and Commodiouſly; and as Plenty, their Families and Ci-

vility increas'd; began to Inlarge, and make their Habitations, as well leſs Rudely, as more Convenient; proceeding in tract of time to great Politeneſs, and to that height of Splendor and Magnificence; as at laſt, Ingenious Men, from long Experience ſtill advancing in Improvements, began to frame ſuch *Rules* and Precepts for *Building*, as ſhould anſwer to all thoſe *Perfections* deſirable in a *Building*, namely, *Solidity*, *Uſe*, and *Beauty*, and this *Art* was called,

Architectura. *Architectura*, a Term deriv'd from the *Greek* Subſtantive Ἀρχιτεκτόνημα, and which is by *ſome* taken for the *Art* it ſelf, by *others* for the Work, *ædificio ipſo & Opera*, (by *us* for *both*) is thus defin'd; *Scientia pluribus diſciplinis, & variis eruditionibus ornata, cujus judicio probantur, omnia quæ a cætris artibus perficiuntur, opera.* *Architecture* (ſays our Maſter *Vitruvius*) is a *Science* qualified with ſundry other *Arts*, and adorn'd with variety of *Learning*, to whoſe Judgment and Approbation all other Works of *Art* ſubmit themſelves. Or rather in ſhort, and as effectual *cujus præceptis diriguntur, & judicio probantur*, &c. for ſo it ſeems to be more explicite; ſince in a *Geometrical* Problem there are both the *Conſtruction*, or Direction *Operis faciendi*, which theſe *Præcepta* define; and alſo, the *Demonſtration* or Probation *Operis jam facti*, which is ſpecified by the *Judicium* in the *Vitruvian* Definition. I conceive therefore the *firſt* part to be the more Eſſential and Inſeparable; the *latter* to be but the Reſult of the *former*, and no more Ingredient into the *Art*, than the Image of ones Face in a *Glaſs* is conſtitutive of the Man.

But to forbear any farther *Gloſs*, you ſee what a large Dominion it has, and I might go on: *Ea naſcitur ex fabrica & ratiocinatione*, to ſhew that ſhe is the *Daughter* of *Building*, and *Demonſtration*:

Demonſtratio. Then, (for ſo I affect to render it) that *Building is the reſult of an aſſiduous and manual Practice or Operation upon apt Materials according to the Model propounded*; and laſtly, That our *Ratiocination is an Ability of Explicating what we have done by an Account of the juſt Proportions*; In a Word, it is the *Art of Building well*, which (taken in the large Senſe) Comprehends all the ſorts and kinds of *Buildings* whatſoever, of which there are more eſpecially *Three*; which tho' differing in their Application, Deſign and Purpoſe, are yet of near Relation to one another, and therefore not improperly, under the ſame Denomination, with their reſpective Adjuncts of Diſtinction: For Inſtance, The Building of *Ships*, and other Veſſels for Sailing, War and Commerce, &c. is call'd *Naval Architecture*: The Art of *Fortification* and Defence of Places *Military Architecture*; which, tho' under the ſame Rules and general Principles, whereby to work and proceed (but indeed making uſe of different *Terms* of *Art*) yet paſs they under the ſame general Name of *Architecture*. Now for as much as there's only *One* of theſe, which properly concerns the preſent *Subject* (as being indeed the moſt Eminent, and *Firſt* in Order) we

we are here to underſtand by *Architecture*, the *Art* and *Skill* of *Civil Building* for Dwelling-Houſes, Commodious Habitations, and more Publick Edifices.

What pretence this part of *Architecture* has to both the other kinds, namely, the *Naval* and *Military*; the Foundation and Building of *Cities*, *Walls*, *Towers*, *Magazines*, *Bridges*, *Ports*, *Moles* and *Havens*, abundantly ſhew; together with what our Great *Maſter Vitruvius* has taught in the Conſtruction of divers *Machines*, and Warlike Engines, as well for Offence as Defence: and to ſhew how Reconcilable all theſe different ſorts of Building are to one another; we have a *Modern*, but an Illuſtrious Inſtance, in that Surprizingly Magnificent Piece of Art, the *Pentagonal Palace* erected for *Cardinal Alexander Furneze* at *Caprarola* (within twenty Miles of *Rome*) by that Excellent and Skilful *Architect Vignola*, one of the Firſt Rank and *Claſs* of Artiſts in the foregoing *Parallel*.

With Reaſon therefore, as well as Right, has the *Surveyor* of His *Majeſties Works* and *Buildings*, both the *Military*, as well as *Civil Architecture*, properly under his Intendency and Inſpection, by a *Grant* (as I have heard) of many Hundred Years paſt. But

To Enlarge on the ſeveral Heads of *Civil Architecture* (of which there are very many) would be to Extend this Diſcourſe to a length not ſo proportionable to that which is deſign'd: Let it then Suffice to take Notice, That it is the Antient *Greek* and *Roman Architecture* only, which is here Intended, as moſt entirely anſwering all thoſe Perfections requir'd in a Faultleſs and Accompliſh'd Building; ſuch as for ſo many Ages were *ſo* Renowned and Reputed, by the Univerſal Suffrages of the Civiliz'd World, and would doubtleſs have ſtill ſubſiſted, and made good their Claim, and what is Recorded of them; had not the *Goths*, *Vandals* and other Barbarous Nations, Subverted and Demoliſh'd them, together with that Glorious *Empire*, where thoſe ſtately and pompous Monuments ſtood; Introducing in their ſtead, a certain Fantaſtical and Licentious manner of Building, which we have ſince call'd *Modern* (or *Gothic* rather) Congeſtions of Heavy, Dark, Melancholy and *Monkiſh Piles*, without any juſt Proportion, Uſe or Beauty, compar'd with the truly *Antient*: So as when we meet with the greateſt Induſtry, and expenſive *Carving*, full of *Fret* and lamentable *Imagry*; ſparing neither of Pains nor Coſt; a Judicious Spectator is rather Diſtracted and quite Confounded, than touch'd with that Admiration, which reſults from the true and juſt *Symmetrie*, regular Proportion, Union and Diſpoſition; Great and Noble manner, which thoſe *Auguſt* and Glorious Fabrics of the *Antients* ſtill Produce.

It was after the Irruption, and Swarms of thoſe Truculent People from the *North*; the *Moors* and *Arabs* from the *South* and *Eaſt*, over-running the Civiliz'd World; that wherever they fix'd themſelves,

ſelves, they ſoon began to Debauch this Noble and Uſeful Art; when inſtead of thoſe Beautiful *Orders*, ſo Majeſtical and Proper for their Stations, becoming Variety, and other Ornamental Acceſſories; they ſet up thoſe Slender and Miſquine *Pillars*, or rather bundles of *Staves*, and other incongruous Props, to ſupport incumbent Weights, and pondrous Arched Roofs, without *Entablature*; and tho' not without great Induſtry (as *M. D'Aviler* well obſerves) nor altogether Naked of Gaudy *Sculpture*, trite and buſy Carvings; 'tis ſuch as rather Gluts the Eye, than Gratifies and Pleaſes it with any reaſonable Satisfaction: For Proof of this (without Travelling far abroad) I dare Report my ſelf to any Man of Judgment, and that has the leaſt Taſte of Order and Magnificence; If after he has look'd a while upon *King Henry* the VIIth's *Chappel* at *Weſtminſter*; Gaz'd on its ſharp *Angles*, *Jetties*, Narrow Lights, laine *Statues*, *Lace* and other *Cut-work* and *Crinkle Crankle*; and ſhall then turn his Eyes on the *Banqueting-Houſe* built at *White-Hall* by *Inego Jones* after the Antient manner; or on what his *Majeſties* preſent *Surveyor* Sir *Chriſtopher Wren* has lately advanc'd at St. *Paul*'s; and conſider what a Glorious Object the deſign'd *Cupola*, *Portico*, *Colonads* and other (yet Unfiniſh'd) Parts, will then preſent the Beholder: Or compare the *Schools* and *Library* at *Oxford* with the *Theatre* there; or what he has lately Built at *Trinity College* in *Cambridge*, and ſince all theſe at *Greenwich* and other Places (by which time our *Home-Traveller*, will begin to have a juſt *Idea* of the *Antient* and *Modern Architecture*) I ſay, let him well conſider, and compare them judiciouſly, without Partiality and Prejudice; and then Pronounce, which of the two *Manners* ſtrikes the Underſtanding as well as the Eye with the more Majeſty, and ſolemn Greatneſs; tho' in ſo much a Plainer and Simple Dreſs, Conform to the Reſpective *Orders* and *Entablature*; and accordingly determine, to whom the Preference is due: Not as we ſaid, that there is not ſomething of ſolid, and *Odly* Artificial too, after a ſort: But then the Univerſal and unreaſonable Thickneſs of the Walls, Clumſy Buttreſſes, Towers, ſharp pointed Arches, Doors and other Apertures, without Proportion; Non-Senſe Inſertions of various Marbles impertinently plac'd; Turrets and Pinacles thick ſet with *Monkies* and *Chymæras* (and abundance of buiſy Work and other Incongruities) diſſipate and break the Angles of the Sight, and ſo confound it, that one cannot conſider it with any Steadineſs, where to begin or end; taking off from that Noble *Aier* and *Grandure*, Bold and Graceful Manner, which the *Antients* had ſo well, and judiciouſly Eſtabliſh'd: But, in this ſort have they, and their Followers ever ſince fill'd, not all *Europe* alone, but *Aſia* and *Africa* beſides, with Mountains of Stone, vaſt and Gygantick Buildings indeed; but not Worthy the Name of *Architecture*: Witneſs (beſides frequent Erections in theſe Kingdoms, Inferior to none for their utmoſt Performances)

ances) what are yet ſtanding at *Weſtminſter*, *Canterbury*, *Salisbury*, *Peterborow*, *Ely*, *Wells*, *Beverly*, *Lincoln*, *Glouceſter*, *York*, *Durham*, and other *Cathedrals* and *Minſters*: What at *Utrecht*, *Harlem*, *Antwerp*, *Strasburg*, *Baſil*, in the lower and upper *Germany*: At *Amiens*, *Paris*, *Roan*, *Tours*, *Lyons*, &c. in *France*; at *Milan*, *Venice*, *Florence*, nay in *Rome* her ſelf: In *Spain*, at *Burges*, and *Seville*, with what the *Moors* have left in *Athambrant*, *Granada*. The *Santa Sophia* at *Conſtantinople*; That of the *Temple* of the *Sepulchre* at *Jeruſalem* (at the Decadence at leaſt of the Art.) The *Zerifs* Palace at *Morocco*, &c. beſides the innumerable *Monaſteries* and Gloomy *Cells*, built in all theſe Places by the *Chriſtians*, *Greeks*, *Latines*, *Armenians*, *Moors*, and others ſince the Ruin of the Empire; and compare them (almoſt numberleſs as they are) with *One* St. *Peter*'s at *Rome* only, which, with the reſt of thoſe venerable *Churches*, Superb and Stately *Palaces* there and at *Naples*, *Florence*, *Genoa*, *Eſcurial*, *Paris*, *Amſterdam*, &c. were yet all but ſorry Buildings, till *Bramante*, *Raphael*, *Mich. Angelo*, *Palladio*, (*Bernini*,) and other *Heroes* and Maſters of our *Parallel*, Recover'd and even Raiſed this *Art* to Life again, and Reſtor'd her to her Priſtine Splendor and Magnificence, after ſo tedious and diſmal a Night of Ignorance and Superſtition, in which *Architecture* had lain Buried in Rubbiſh, and ſadly deform'd for ſo many Ages: The ſame may likewiſe be affirm'd of all thoſe other *Arts* attendant upon her, *Sculpture* and *Painting* eſpecially, and indeed of *Letters*, and all good Learning too, which had about this time, their *Reſuſcitation* alſo; In a Word, and after all that has been ſaid of *Architecture* Antient or Modern; 'tis not we ſee enough to Build for *Strength* alone (for ſo thoſe *Gothic* Piles we find ſtand their Ground, and the *Pyramids* of *Ægypt* have out-laſted all that Art and Labour have to ſhew) or indeed for bare *Accommodation* only, without due *Proportion*, *Order* and *Beauty*, and thoſe other *Agreements*, and Genuine *Characters* of a Perfect, and Conſummate Building; and therefore an *Art* not ſo eaſily attain'd by every Pretender, nor in Truth at all; without a more than ordinary *Diſpoſition*, accompanied with Judgment, Induſtry and Application; due Inſtruction, and the Rules of Art Subſervient to it. Thus Accompliſh'd, an *Architect* is perfectly qualified to anſwer all the *Tranſcendencies* of this Noble *Art*, which is to Build *Handſomly*, *Solidly* and *Uſefully*.

We have already ſpoken of *Workmen*, and *Manuary* Aſſiſtants, in the foregoing *Paragraphs*, without whoſe more than ordinary Skill and Diligence, the Learned'ſt Architect miſtakes the Shadow, for Subſtance, *umbram, non rem conſecutus videtur*, and may ſerve to rear a *Tabernacle*, not Build a *Temple*, there being as much difference between *Speculation* and *Practice* in this *Art*, as there is between a *Shadow* and a *Subſtance*; but with what Advantages thoſe Perſons proceed who both know, and can apply, I have already

Demonſtrated ; and when we conſider that the whole *Art* conſiſts in the moſt Exact and Elegant Order imaginable, it is not to be wondered there have been ſo few able Men of the *Profeſſion :* Sir *H. Wotton*, who reckons thoſe two Parts for one, that is, the fixing of the *Model* to a full Expreſſion of the firſt *Idæa*, paſſes (with our *Maſter*) to the *Species* or kinds of this *Diſpoſition.*

Taxis. *Taxis*, or as *Architects* call it, *Ordonance* ; as defined by our *Maſter*, to be that which gives to every part of a Building the juſt *Dimenſion*, relating to its Uſes ; Mr. *Perault* ſuppoſes neither ſo explicit, nor as the Thing it ſelf requires, or anſwerable to the Intention ; which he takes to conſiſt in the *Diviſion* of the *Plan* or ſpot of Ground on which one intends to Build ; ſo to be apportioned and laid out (as to the Dimenſion of the reſpective parts, referring to their Uſe) as conſiſts with the Proportion of the whole and intire Fabric ; which in fewer Words, I conceive differs little from the Determinate Meaſures of what's aſſigned to Compoſe the ſeveral *Appartments* ; to which ſome add, That which gives the utmoſt Perfection to all the Parts and Members of the Building : But (to proceed with the Learned Commentator) 'tis the judicious Contrivance of the *Plan* or *Model*, which he means by *Ordonance* here : As when, for Inſtance, the *Court*, the *Hall*, *Lodgings* and other Rooms are neither too large, or too little : *v. g.* That the *Court* afford convenient Light to the Appartments about it, and be large enough for uſual Acceſs ; That the *Hall* be of fit Capacity to receive Company : The *Bed-Chambers* for Perſons of Quality, and others ; Or elſe when theſe Diviſions are either too great, or too ſmall, with Reſpect to the Place ; as a very *large Court* would be to a *little Houſe*, or a *little Chamber* in a great and Noble *Palace :* Whereas *Diatheſis*, Diſpoſition, is where all the Parts and Members of a Building are aſſign'd their juſt and proper Places, according to their Quality, Nature, Office Rank and Genuine Collocation ; without Regard to the Dimenſion or *Quantity*, which is another Conſideration, as Parts of *Architecture* ; tho' ſtill with Relation to its Perfection. Thus the *Veſtibule* or Porch, ſhould precede the *Hall* ; The *Hall* the *Parlor*, next the *Withdrawing-Room*, which are of Ceremony, I ſpeak (as with us in *England*) where the *Firſt Floor* is commonly ſo Compoſed of : The *Anti-Chambers*, *Bed-Chambers*, *Cabinets*, *Galleries* and Rooms of *Parade* and State in the Second Stage, ſuitable to the Expence and Dignity of the Owner : I ſay nothing of the *Height*, and other Dimenſions ; becauſe there are Eſtabliſh'd *Rules :* But it is what I have generally obſerved, Gentlemen (who are many times at conſiderable Charges in otherwiſe Handſome and Convenient Houſes) moſt of all to fail in ; not allowing Decent *Pitch* to the reſpective Rooms and Appartments, which I find they conſtantly Repent when 'tis too late : One ſhould ſeldom therefore allow leſs than *Fourteen Feet* to

to the *First Floor*; *Twelve*, or *Thirteen* to the *Second*, in a dwelling House of any considerable Quality; to greater Fabrics, and such as approach to *Palaces*, 16, 18, 20, &c. with Regard to other Capacities: Nor let the less Benign Temper of the *Clime* (compar'd with other Countries) be any longer the pretence; since if the Building and Finishing be Stanch; the *Floors* well lay'd; *Appertures* of *Doors*, and *Windows* close; that Objection is answered; The same Rules as to the Consequence of Rooms and *Oeconomy* is to be observed in the Distribution of the other *Offices*, even the most Inferior, in which the Curious consult their *Health*, above all Conveniency; by designing their best Lodging-Chambers towards the *Sun-rising*; and so *Libraries*, *Cabinets* of Curiosities and *Galleries*, more to the *North*, affording the less Glazing and fittest *Light* of all other to *Pictures*, &c. unless where some unavoidable Inconvenience forbid it. Another great *Mistake*, I likewise have observ'd to be the Cause of many Errors as Incurable; namely, a Fond, Avaritious, or Obstinate Resolution of many; who having choice of Situations; for the sparing of an old *Kitchin*, Out-*House*, *Lodge* or Vulgar Office; nay and sometimes of an *Antient Wall*, a fine *Quick-set Hedge*, particular *Tree* or two, or the like; continue to place the *New-Building* upon the *Old Foundation*, tho' never so much awry and out of all Square; and (as often I have seen) near some Bank of Earth, which cannot be mov'd; pleas'd with *Front* or Gaudy *Out-side*, whilst all is Gloomy and Melancholy *within*, and gives Occasion of Censure to the Judicious, and Reproach to others; in a Word, I have very rarely, or as seldom found a New-Building joyn'd with any tollerable Decency or Advantage, to an Old one, as a Young and Beautiful *Virgin*, to and Old, Decay'd and Doating *Husband*: I might almost affirm as much concerning *Repairs*, where there are great Dilapidations; Since by that time they have Calculated all Expences of pulling down and patching up; they might have Built Intirely New from the Ground, with the same, and oftentimes, with less Charge; but with abundance more Beauty and Conveniency: Frequent Instances of like Nature might I produce, and of such as have too late Repented; But I am to beg Pardon for this *Transcursion*, for which I have no other *Apology*, than that since another *Edition* of this Piece is never likely to come under my Hand again; I have taken the Liberty of *this* to speak my Thoughts the more freely; not without hope, that some may be Edified by it, and have Cause to thank me for it.

To return therefore whence I diverted; I now proceed to the proper Argument, and Design of this Discourse, which concerns the *Terms* of *Architecture*, with such Improvements as fall in with the Subject: Not that our *Politer Workmen* do not understand them well; but for the Benefit, and Instruction of the less knowing; or such,

ſuch, who, tho' Learn'd, and knowing in other *Arts*, may haply not have much conſider'd this, and the firſt is,

Ichnographia *Ichnography*, by which we are to underſtand the very firſt *Deſign* and *Ordinance* of a Work or Edifice, together with every *Partition* and *Opening*, drawn by *Rule* and *Compaſs* upon the *Area* or Floor, by *Artiſts* often call'd the *Geometrical Plan* or *Plat-form*, as in our Reddition of the *Parallel*: The *Greeks* would name it ἰχνογραφὴ *Veſtigii Deſcriptio*, or rather *Veſtigium Operis*, the ſuperficial Efformation of the future Work, which our *Ground-plot* does fully interpret. This is properly the Talent and Work of the Chief *Architect* or *Surveyor* himſelf (and indeed the moſt Abſtruſe and Difficult [illegible] which he expreſſes his Conception and *Idea* for the Judicious Collocation, Homogeneous and apt Diſpoſition, right Caſting and Contrivement of the ſeveral *Parts* and *Rooms* according to their diſtinct *Offices*, and *Uſes*; for as *Ordonation* imports the *Quantity*, ſo does *this* the *Quality* of the *Building*, but of this already, to this ſucceeds

Orthographia. *Orthography*, or the erect Elevation of the ſame in *Face* or *Front*, deſcrib'd in Meaſure upon the former *Idea*, where all the *Horizontal* Lines are *Parallels*: Some do by this comprehend the *Sides* likewiſe (but ſo will not I) to be ſeen as well within as without the *Model*. It is in Truth but the ſimple Repreſentation of that Part oppoſite to the Eye of the Beholder, and thence by *Italian l' Alzato* or *l' Impiedi*, *facciata* and Frontiſpiece, without *Shadows* or other Deceptions, and the Second *Species* of *Diſpoſition*. The laſt is,

Scenographia. *Scenography* or (as ſome) *Sciography*, which is the ſame *Object* elevated upon the ſame *Draught* and *Centre* in all its *Optical* Flexures, Diminutions and Shadows, together with a fore-ſhorting of a *Third* Side, ſo as the whole *Solid* of the *Edifice* becomes viſible in *Perſpective* (as they ſay) becauſe compoſed of the *Three* Principal *Lines* uſed in that Art, *viz.* that of the *Plan* or *Plot*, belonging to the firſt *Idea*; that of the *Horizon* or Eye-line, which denotes the *Second*; and the *Line* of *Diſtance* which makes the *Third* with all its *Adumbrations* and

Profile. ſhadowings, which diſtinguiſhes it from what they call the *Profile* ſignified by the Edging ſtroaks by ſome call'd out Lines, and *Contours* only, without any of this Solid finiſhing. From all which it appears, That not the bare *Idea*, or *Species* (as the Term is in *Vitruvius*) or as others, the various Kinds of *Diſpoſition* is to be underſtood; but the ſeveral *Deſigns* and Repreſentations of the *Diviſion*: Seeing in Truth, theſe three *Draughts* upon Paper, belong as much to the *Ordonance* as the *Diſpoſition* ſhewing and deſcribing the Meaſures and Dimenſions of the Inſpective Parts, *Order* and *Poſition*: From theſe three *Ideas* then

Eurythmia it is, that ſame *Eurythmia*, Majeſtic and *Venuſta ſpecies Ædificii* does Reſult, which Creates that agreeable Harmony between the ſeveral Dimenſions; ſo as nothing ſeems Diſproportionate, too long for this, or too broad for that, but Correſponds in a Juſt and Regular

Sym-

Symmetry and Conſent of the Parts with the whole: For *Symmetry* is the Parity and Equality between the Parts Oppoſite; ſo as one be not bigger, higher, longer, ſhorter, cloſer, or wider than the other: Suppoſe a *Column* ſwelling more at one ſide than the other; and not as thoſe who thought it to Conſiſt in the proportion of ſome Principle Part or Member only, *Capitel* or *Cornice*, groſſer or projecting farther than the *Order* permits; which ſeem two different Things; whilſt *Proportion* among *Architects* conſiſts in ſuch an agreement and conſent as we find in every well limb'd and compos'd *Living Animal*, of whatever *Species* or kind ſoever, where the due *Make* of each Member of the Body denominates the Compleatneſs of the *Figure*, be it *Statue*, or the *Life*; and the ſame in *Building*, and the parts thereof; in a Word, where *Convenience*, *Strength* and *Beauty* meet and render it accompliſh'd. Laſtly, *Symmetry*

Decor, which is not only where the *Inhabitant*, and *Habitation* ſuit, ſeeing that is many times accidental; but where a *Building*, and particularly the *Ornaments* thereof, become the *Station* and *Occaſion*, as *Vitruvius* expreſly ſhews in appropriating the ſeveral *Orders* to their Natural Affections; ſo as he would not have ſet a *Corinthian Column* at the Entrance of a *Priſon*, nor a *Tuſcan* before the *Portico* of a *Church*, as ſome have done among us, with no great Regard to the *Decorum*: Here therefore it is, That the *Judgment* of an *Architect* ought to be Conſulted, ſince even in the Diſpoſition of the *Offices* of our moſt private Houſes, we find no where greater Abſurdities committed, whilſt we many times find the *Kitchin* where the *Parlour* ſhould have been, and that in the firſt and beſt Story, which ſhould have been damned to the lowermoſt and the worſt. *Decor.*

Philander ſeems to be in ſome doubt whether the *Architect* did after all this make a *Model* of his future Work, but at laſt reſolves it in the *Affirmative* for many Reaſons, *ita enim futura deprehenduntur errata, & minimo impendio, nulloque incommodo*, &c. for ſo (ſays he) future *Errors* may be timely prevented, with little coſt, and without any trouble before the Remedy proves incorrigible. Now tho' perhaps an accompliſh'd *Architect* needs it not, yet as there is nothing certainly ſpar'd to leſs purpoſe, and more to the detriment of Builders than the ſmall Expence of making this *Prototype*; ſo it has been known that ſome Excellent *Maſters* have without Reproach, cauſed ſeveral to be made of the ſame Building, and for the better, and which ſhould be fram'd with all its *Orders*, and *Dimenſions*, by the Aſſiſtance of ſome skilful *Joyner*, or other Ingenious *Artiſt* in ſome ſlight Material, which may be to remove, uncover and take in pieces, for the Intuition of every *Contignation*, *Partition*, *Paſſage*, and *Aperture*, without other Adulteration by *Painting* or gaudy Artifice, but in the moſt ſimple manner, as Sir *H. Wotton* prudently adviſes, *Model*

for Reaſons moſt Material and Unanſwerable ; This is by ſome ſupplied with a *Perpendicular Section* of the *Orthographical Elevation*, which lets the Eye into the Rooms in front only ; the *Model* into the whole ; but from all which we may deduce how abſolutely neceſſary it is, that an *Architect* have more than a Vulgar Dexterity in the Art of *Deſigning* and Drawing, *Quæ autem conferant, imo, quæ ſint Architecto penitus neceſſaria ex artibus, hæc ſunt, Pictura & Mathematica ; in cæteris doctuſne ſit, non laboro :* So the *Patriarch*, lib. 9. upon that of our *Maſter*, lib. 1. c. 1. *Peritus Graphidos*, &c. and then concludes, *Neceſſaria igitur eſt Architecto Graphidis (i. e.) deſignationis ut Itali dicunt peritia*, as being a thing altogether indiſpenſable ; but of this already, for by the *Method* of a Compleat *Courſe* or *Body* of *Architecture*, one ſhould proceed to the more particular Diſtributions of this *Art*, whether in Reſpect to Private or Publick Buildings, but I leave it for ſome perfect Edition of what remains of the incomparable *Palladio* ; when either by the ſame it is begun, or by ſome other Charitable Hand, That, or our Maſter, *Vitruvius* himſelf, as Publiſh'd by the Learned *Perault* ſhall be taught to ſpeak *Engliſh* ; and the *Title* of this *Diſcourſe*, which minds me of a through *Explanation* of the more difficult *Terms* of this *Art*, for being principally, if not only Converſant about the five *Orders* and their *Ornaments* (the ſubject of our Learned *Parallel*) calls me back to a diſtinct Survey of them, and I will begin at the Foundation.

Fundamentum.

Now tho' all that is buried in the Ground to the *Area* be ſo call'd, yet properly *Foundation* is the very *Cofer* or *Ground-bed* ſearch'd *ad ſolidum, & in ſolido*, as our *Maſter* adviſes, and upon which a wiſe Man would only Build and raiſe the *Proto-ſubſtruction*, or firſt beginning of his Wall, and ought commonly to be double the thickneſs of the *Superſtruction.* This the *Greeks* call'd,

Stereobata.

Stereobata στερεοβάτης *ſolidum fulcimentum*, for its artificial firmneſs, as immediately ſucceeding the underfilling of the former (for ſo we name thoſe dry *Materials* upon the Surface) to be the *Baſis* of the whole *Edifice* : I am not ignorant that ſome contend about this *Office*, confounding it with the *Stylobata* and *Pedeſtals* of *Columns*, aſſigning them a regular thickneſs of half as much more as the *Orders* they ſupport ; and then he *Italians* call it the *Zoccolo*, *Pillow* or *Die*, becauſe of its *Cubique* and ſolid Figure : But I rather take it for the *Baſamento* of the *whole*, which I would threfore rather augment than contract to that ſtinted dimenſion : The Reverend *Daniel Barbaro*, c. 8. l. 2. deſcribes us all the kinds of them, and calls this in particular (and which confirms this diviſion) the concealed part, or *fundatio in imo* : And then by this elegant *diſtinction* defines *Structura* to be that of *Fronts* ; *Inſtruction*, that of the *middle* Parts ; and *Subſtruction*, of the *Lower* ; though this laſt Notion does likewiſe

Structura. Inſtructio. Subſtructio

many

many times import ſome vaſt and magnificent Building ; for ſo *Baldus* has cited that paſſage in *Liu.* l. 6. where he names the ſtately *Capitol* a *Subſtruction* only, and other Authors *Subſtructiones inſanas*, for ſuch vaſt and enormous Fabricks : But that we may not omit the *Pedeſtal* (though of rarer uſe amongſt the *Antients*) I come next to the

Stylobata ; For our *Pedeſtal* is *vox Hybrida* (a very mungril) not *a Stylo*, as ſome imagine, but *a Stando*, and is taken for that ſolid *Cube*, or ſquare which we already mentioned to be *that* to the *Column* impoſed, which the *Superſtructure* is to *this*, *Fulcimentum Columnæ* : It is likewiſe call'd *Truncus* the Trunk (though more properly taken for the *Shaft* or *Body* of an *Order*) contained between the *Cornice* and *Baſe* (for *Pedeſtals* have likewiſe thoſe *Ornaments* inſeparably) alſo *Abacus*, *Dado*, *Zocco*, &c. which is ſometimes Carv'd with *Baſs-relievo* in Hiſtorical *Emblems*, as that of *Trajan*'s at *Rome*, and ours on *Fiſh-ſtreet* Hill : But as it was rarely uſed among the *Antients* ; ſo they were all *Square* alike to all the *Orders* : till from good Examples, by later *Architects*, (and eſpecially *Palladio*) reduc'd to Proportion and very graceful. Thoſe which are more large than high, are called *double Pedeſtals* ſupporting double *Columns*, and ſome which are continu'd thro' the whole Building. Alſo *Poggio*, from its Office of ſupporting, and then 'tis conſtantly adorn'd with a *Cornice* conſiſting of a *Cymatium* on a *Corona* with *Liſts*, and ſometimes *Scotia* or ſhallow *Cavities* and an addition of an upper *Zocco* or *Plinth* of a ſmaller hollow and part of the *Cymatium*, upon which the *Scamilli impares Vitruviani* were ſet, if deſign'd for *Statues* : Or, if without, for *Columns*. The *Baſe* has likewiſe an *Ornament* of a *Cymatium inverted* upon a *Plinth*, as may be ſeen in the *Corinthian Stylobata* : The general Rule is to divide the whole into 19 Parts ; the *Pedeſtal* ſhall have 4, the *Intablature* 3, but if a *Column* be without *Pedeſtal*, Divide the height but into 5 equal Parts, 4 to the *Column*, and to the *Entablature* 1 : But, as we affirm'd, the *Antients* did ſeldom uſe *Pedeſtals* at all, unleſs where *Rails* and *Baluſters* were requiſite, and *Parapet* Walls for *Meniana*, *Pergolas* and *Balconies*, and where they ſerv'd for *Podia* or *Poſaries* of a leaning Height, for which they had a ſlight *Cornice* aſſign'd them ; and this minds me of the σῆλαι among the *Greeks*, as indeed ſeeming to have been deriv'd from the Eaſtern אוּלָם uſed, and to the *Jews* (we read) enjoyn'd upon their flat-roofed Houſes, theſe *Baluſters* being in truth but a kind of petty *Columns* under the Rails or *Architrave* between *Pedeſtal* and *Pedeſtal* for that moral Reaſon, the ſecurity of the Walkers, eſpecially at what time they uſed to ſpread *Tents* upon them, as frequently they did : But if (as we ſaid) for the better eminence of *Figures*, then with the Impoſition of

Sca- *Stylobatum Pedeſtal.*

Scamilli. *Scamilli impares*, of which there is ſo much contention amongſt our *Hypercritical* Architects, though in fine they prove to be but certain Benches, *Zoccos* or Blocks elevating the reſt of the Members of an *Order*, *Column*, *Signum* or *Statue* from being drowned or loſt to the *Eye*, which may chance to be plac'd below their *Horizon*; that is, beneath the Projectures of the *Stylobata Cornices* and other *Sailies*, by an agreeable Reconciliation of *Geometry* with the *Opticks*: In a Word, the *Pedeſtals* of *Statues* do well expreſs them, and thoſe half-round Elevations, or other unequal Eminences upon the *Stylobata*, be they *one* or more *Plinths*, like ſo many ſteps ſucceeding one another for the Advantage of what ſtands upon them: In the mean time, we find no *Proportions* or form aſſign'd for the placing *Statues*, *Buſts* or other *Figures*, which ſeems to be left Arbitrary, with regard to the Subject: The lower *Pedeſtals* beſt ſuiting with the higher, contrary to *Buſts*, or where more than one together, as *Groups* ſitting, and *Cumbent* Figures, which require longer, &c. with ſuch Ornament and Decoration as beſt becomes them; as to *Nymphs*, *Tritons*, *Sea-Gods*, *Eſcalop-Shells*, &c. to *Deeſſes*, the more Delicate, to *Satyrs*, *Ruſtic* Work, &c. But to proceed to the *Orders* and their ſeveral *Members* as they Naturally riſe in Work.

Baſis. The *Baſe*, deriv'd from the *Greek* Verb βαίνειν, imports the Suſtent, Prop or Foot of a Thing, and is in *Architecture* taken not for the lowermoſt Member of an *Order*, but for all the ſeveral Ornaments and Mouldings from the *Apophyges* or riſing of the *Columns* Shaft, to the *Plinth*: Sometimes alſo for the *Spire*; which lying on the *Plinth* like the *Coile* of a Cable derives thence its Name, though ſomething improperly methinks, conſidering theſe Members do not run Spiral, but Obliquely rather and *in orbem*: In ſum, the *Baſis* is to the *Column* and its *Entablature*, what the *Stylobata* is to the *Baſis*, and the *Stereobata* to the *Pedeſtal*. Here Note, that when a *Cornice* is added to a *Baſe*, it becomes a *Pedeſtal*, and that to the *Corinthian* or *Compoſita* the *Attic Baſe*, and tho' faireſt of all, and us'd in other *Orders*; by no means ſo properly: It is often inrich'd with Sculpture, eſpecially in the *Compoſita*; for *Baſes* differ according to the *Order*: *Tuſcan* has a *Torus* only; the *Doric* an *Aſtragal* more, by ſome eſteem'd a modern Addition: The *Ionics Torus* is larger on a double *Scotia*, betwixt which are two *Aſtragals*: The *Compoſita* an *Aſtragal* fewer than the *Corinthian*. The *Attic Baſe* (or as ſome, the *Attic-Curgi*) conſiſts of a *Plinth*, two *Torus*'s and *Scotia* properly plac'd under the *Ionic* and *Compoſita*, and indeed, as was ſaid, to all, *Tuſcan* excepted, which has its peculiar *Baſe*: But to proceed to other particulars.

Spira. The

The

The *Plinth* is the firſt, and very loweſt Member of the *Baſe*. The Word denotes a *Brick* or ſquare *Tyle*, of which happly they were uſually made, but rather for the reſemblance; becauſe of the weight it was to bear, and therefore more probably of ſomething more ſolid to preſerve the Foot of the *Column* from rotting, when firſt *Pillars* were made but of the Tapering Bodies of *Trees*, as we ſhall ſhew hereafter: *Plinth* is likewiſe taken for a like Member about the *Capitel*, but then always with its Adjunct, *the Plinth of the Capitel*, &c. becauſe placed juſt above the *Echinus* as in the *Doric*, *Ovolo* or quarter round in the other *Orders*. The *Italians* familiarly name it *Orlo*, which importing a round Welt, Hem or Brim, methinks is not ſo properly applied to it: By *Plinth* is alſo to be Underſtood any flat, thick *Moulding* in the Fore-Walls of any Building, ranging like a broad *Liſt* with the ſeveral *Floors* or Stages. The next is, *Plinthus.*

Torus, the third Member of the *Baſe* (of which there is *Superior* and *Inferior* in the *Baſes* of all the *Orders*, the *Tuſcan* excepted) comes from τόρος denoting the roundneſs and ſmoothneſs of it; *Torus enim quicquid rotundum*, or rather as *Scaliger*, *quod artificialiter elaboratur & tornetur*, becauſe artificially made ſo; but why not from its ſwelling and brawnineſs? It much reſembles the Shape of a round Cuſhion, *Torques* or Wreath, thence σίφας, and the impoſed weight makes it ſeem to ſwell out as if indeed it were ſtuffed, and that with Reaſon ſay the *Critics*, for the more eaſy and ſafe Poſition of the *Torus*.

Trochile, from τρέχω or τρόχα a Rundle or Pully-Wheel, which it much reſembles, and is that Cavity appearing next to the *Torus*: The *Italians* name it *Baſtone*, or more properly *Cavetto*, and *Cortice*, *tanquam baculi cortex*, the hollow Rind of a Tree, as *Barbaro*. Our Workmen retain the Antient *Scotia*, from σκοτία, its obſcurity proceeding from the Shade of the hollowneſs, but more vulgarly they call it the *Caſement*, and it is ever the Cavity between the former *Torus*'s, and alſo beneath the *Doric Cornice* ſeparated from the plain Margin or *Regula* call'd *Mentum* and *Corona* by a ſmall *Cymatium*, or ſometimes a *Liſt* only: The Capital Letter C is almoſt a perfect reſemblance of this *Moulding*, and it is indeed frequently bordured or rather ſhut in with *Liſts*. Laſtly, *Trochilus.* *Scotia.*

The *Aſtragal*, which beſides divers other Things (as the *Septem ſpinæ Vertebræ* near the Neck) has here its Analogy from that Bone a little above the *Heel*, whence the *French* name it the *Talon* or Heel it ſelf (as our Author of the *Parallel*) nor improperly; but by the *Italians*, *il Tondino*, being a kind of half *Torus*, ſometimes wrought in the richer *Orders* like an Over-caſt Hem or Edge to the larger *Tore*, which frequently is plac'd between, as in the *Ionic* Baſe with two *Scotias*, and ſometimes (though rarely) juſt about the *Plinth* of the *Baſe*, as ſome marſhal it: Otherwhiles again it is taken for the *Hoop*, *Cincture* or *Collar* next the *Hypotrachelium* and diminution of a *Aſtragalus*

Column lifted on both Edges; and it runs alſo under the *Echinus* of the *Ionic*. Our *Engliſher* of *Hans Bloome* names it a *Boltell*, or *Fillet* in any part of a *Pillar*, but I take a *Fillet* to be more flat, this more ſwelling, and (as I ſay) *Torus*-like. Moreover we ſometimes find it dividing the *Faſcia* of the *Corinthian Architrave* where it is wrought in *Chaplets* and *Beads*, *Olives* or *Berries*; and finally in two places, both above and beneath the *Liſts* joyning immediately to the Square or *Die* of a *Pedeſtal* where *Stylobata* is introduced; and ſo we have done with the Ornaments and *Mouldings* of the *Baſe*: We come now to the *Column* it ſelf.

Columnæ. ΣΤΛΟΣ nakedly, and ſtrictly taken, is that Part of an *Order* only, which is the Prop or *Columen*, plac'd to ſupport ſomething Superior to it, and is here properly that round and long *Cylinder* diverſly named by Authors, *Scapus*, *Vivo*, *Tige*, *Shaft*, *Fuſt*, *Trunke*, &c. containing the Body thereof from the *Spire* of the *Baſe*, or lately mentioned *Aſtragal*, to the *Capitel*: Sometimes for the Subſtance and Thickneſs of the bottom of the *Pillar*, and in *Authors* for the *Checks* of a Door *Secundum Cardines & Antepagmenta*, of which conſult the Learned *Baldus* in the Word *Replo de Sig. Voc. Vitr.* alſo the Perpendicular *Poſt* of a *Winding-ſtairs*; but for the moſt part for that *Solid* of a *Column* which being divided into three Parts, has (as ſome delight to form them, but without any Reaſon or good

Entaſis. Authority) an *Entaſis* or *Swelling*, and under the *Collerine* or *Cimba* of the *Capitel*, a Contracture and comely *Diminution*, by Workmen call'd the breaking of the Pillar; which in Imitation of the natural Tapering of *Trees*, is ſometimes too much contracted, in others exceſſively ſwell'd. The manner of Operation by applying a thin flat Flexible *Rule*, of the length of the whole *Column*, divided into three equal Parts, beginning at the Perpendicular of the loweſt, is ſo well known, that I need ſay nothing more of it, than that there is hardly any ſenſible Swelling to be perceiv'd in the beſt Examples, and therefore to be ſparingly us'd, and with Diſcretion, if at all: or as *Diſgradet* and ſome affect, tapering very inſenſibly all the way: *Monſieur Perault* preſcribes another Method for this Diminution (ſpeaking of *Nicomedes*'s firſt *Conchoid*, in his learned Comment, *l.* 3. *cap.* 2d. But (returning to where we left) the primary Iſſue or Riſe of the *Shaft* next the *Aſtragal* and neather *Cincture* is call'd

Apophyges. the *Apophyges* from the *Greek* Word Ἀποφυγὴ; becauſe in that part the *Column* taking as it were a *Riſe*, ſeems to Emerge and Fly from the *Baſes* like the *Proceſſus* of a Bone in a Man's Leg; and ſo it is now and then applied to the Square of *Pedeſtals* likewiſe. In ſhort, 'tis no more than an imitation of the *Rings* or *Feruls* heretofore uſed at the Extremities of Wooden *Pillars*, when formerly they were made of that Material, to preſerve them from ſplitting, afterward imitated in Stone-Work as an inſeparable part thereof; and thence doubt-

doubtleſs it is they took their original Contraction: Such Trees as grew in the moſt upright Tenor and comely Diminution, being choſen for this Employment.

Theſe being reſembled in *Stone* (that is of one intire one) by *Solidæ* were diſtinguiſh'd from the *Structiles*, or were ſuch *Pillars* as were Compounded of many.

But it is not here only that theſe *Rings* have place, but next the above deſcrib'd *Aſtragal* likewiſe, and where-ever encounter'd by the Names of *Annulus*, *Cincta*, *Cimbia*, *Liſtello*, *Fillets*, *Regula*, &c. broader or more narrow as beſt ſuits with the Conſecutive Member; like thoſe very ſmall *Liſtellos* or *Annulets* under the *Echinus* of the *Doric* Capitel, by the *Italians* call'd *Gradetti*, Degrees, and by the Interpreters of *P. Lomazzo*, Rulers; and ſo in like manner the *Cimbia* beneath the *Aſtragal* immediately above the *Contraction*. But *Regulæ* and *Fillets* are ſomewhat larger in places where they edge and ſhut in the *Cymatium* of a *Cornice*, *Abacus*, or *Voluta*: Moreover I Note, That *Liſtello* and *Cincta* are broader than *Annulets*, which I take to be the very leaſt of all the *Mouldings* in an *Order*.

The *Capitel*, with its *Ornaments* comes now to be the next collective *Member*. *Capitel.*

We have already ſhew'd what we are to Underſtand by a *Column*, which nakedly conſidered, does not aſſume the Name of *Order*, till it be dreſſed and habited with its diſtinguiſhing Ornaments, the *Capitel*, &c. For tho' by *Ornament* Architects in one Word, ſignifie *Architrave*, *Frieze* and *Cornice*, which ever Accompany and Complear the *Order*; yet 'tis the *Capitel* only which gives its diſtinction and denomination: and albeit their differences may indeed be alſo taken from the Height, Shape and Subſtance, yet hardly without their *Heads*, as the *Ionicæ* and *Corinthian*. We proceed therefore to the Second Member towards the upper Part or *Diminution* of a *Column* (which is always the leſs abated if very tall, becauſe the Diſtance effects that in them, which *Art* produces in the lower) is the

Hypotrachelium, which from the *Greek* ὑποτραχήλιον *colli pars infra cervicem*, denotes the Neck of the *Column*, being that part of *Scapus* below the *Aſtragal*: It is as it were the *Frieze* of the *Capitel*, and ſo by ſome term'd, as alſo the *Collar* and *Gorgerin*, where the *Pillar* is moſt Contracted, and ſeems as if it were ſtrangled, and may well be taken for a part of the *Capitel* it ſelf, having both in the *Tuſcan* and *Doric* another *Annulus* or *Cincta* about it next to the

Echinus, a *Bottle* cut with an Edge, as in our *Bloome* 'tis rudely explained: It is indeed a quarter round, and ſometimes more, ſwelling above the *Cinctures*, and commonly next to the *Abacus*, Carv'd with *Ovals* and *Darts* (by our Workmen call'd *Eggs* and *Ankers* as little Politely) which is frequently ſhut up with a ſmaller *Ovolo* of *Beads* and *Chaplets*, or like Ornament; but ſo adorn'd, it

it commonly runs under the *Ionic Voluta* and that of the *Compósita*, and next the *Doric Abacus*; as in that ſingular Example of the *Trajan Column* it creeps under the *Plinth* of the *Capitel*. Such as pretend to *Etymologies* for every thing they hear, will have it ἰχίῳ ἀπὸ τὰ ἔχειν, or σωέχειν ἑαυτὸν becauſe of a kind of Self-contraction; others more rationally from the reſemblance and roughneſs in the Carving ἐχίνου τρόπον, as briſtling with its Darts like a *Hedge-Hog*, or rather the thorny Husk of a *Cheſt-nut*, which being open'd diſcovers a kind of Oval Figur'd Kernel, which dented a little at the Top, the *Latins* call *Decacuminata Ova*. Under this, as we ſaid, is a ſmaller *Bracelet*, again which incircles the *Capitel* under the *Voluta* in the *Compoſita*, taken for the *Fuſerole*; and ſo likewiſe in the other *Orders* where the *Ovolo* or *Echinus* properly enter; having a ſmall Moulding beneath it, by *Palladio* nam'd *Gradetto*, but of this already: In the *Corinthian* an *Echinus* frequently comes in betwixt the *Corona* and *Dentilli*.

Voluta. The *Voluta*, or as we term it properly enough, the *Scroul*, is not the derivative of any *Greek* Word, but the *Latin*, *Voluta*, *a Volvendo*, for that it indeed ſeems to be roll'd upon an *Axis* or Staff; *Alberti* calls them *Snails* Shells from their *Spiral* turn: It is the Principal, and only appropriate Member of the *Ionic Capitel*, which has *Four*, in imitation of a Femal Ornament, as both our *Maſter Vitruvius*, and the Author of the *Parallel* have Learnedly illuſtrated. The *Face* of it is called *Frons*, the Fore-head, a little hollow'd between the Edge or *Liſt*, and the *Return*, *Pulvin* or *Pillow* betwixt the *Abacus* and *Echinus* reſembles the Side-plaited *Treſſes* of *Womens* Hair, to Defend as it were the *Ovolo* from the weight of the *Abacus* (over which the *Voluta* hangs) and ſuperior Members, for the ſame Reaſon as was intimated in the *Torus* of the *Baſe*.

There are alſo *Voluta*'s in the *Corinthian* and *Compounded Capitels*, whereof the firſt hath *Eight*, which are Angular, the reſt conſiſting rather of certain large *Stalks* after a more *Groteſco* Deſign, as may be gathered from thoſe *Rams Horns* in the *Capitel* of the *Columns* taken out of the *Bathes* of *Dioclesian*: And in Truth they are only the pretty Flexures and Scrowlings of *Vitici*, like the *Tendrels* of *Vines*, whereof the *Four* larger ones bend under the *Horns* or Corners of the *Abacus*, the other *Four* of leſſer Size, juſt under the middle of the *Arch* thereof, beneath the *Flower*: Then the Bottom or Foot of the *Calathus* or *Panier* (for that's divided into three equal Parts, as will hereafter appear) ſhows in Front *two* entire *Leaves*, and as many half ones, *viz.* at the *Angles*, and betwixt thoſe again two *Stalks*, which, with a *Tall one* in the middle (that touches the midſt of the *Arch*, as we ſaid, it puts forth a *Flower* upon the Brim of the *Abacus*) make in all *ſixteen* in number. To be yet as accurate as may be in ſo Nice and Florid an *Ornament*, theſe *Leaves* did of old reſemble

ſemble either the *Acanthus* (though a little more Indented and Diſguiſed) from the Inventor *Callimachus*, or (as ſome) the *Olive* and *Palm*, for ſo it is warranted by *Villalpandus* from that *Capitel* of his Deſcription ſtanding in the *Temple* of *Solomon*. At the Extreams of theſe Leaves do iſſue the *Caules*, and *Codds*, breaking with the *Helices*, the reſt of the *Stalks* adorn'd and furniſh'd with Buds and tender Foliage by the Diſcretion and Invention of the Ingenious *Carver*. But the Domineering *Tendrels* and *Flexures* conſiſt of greater, or ſmaller *Volutas*, emerging from between the *Abacus* and *Echinus* in *ſmaller* Leaves and Stalks, *Midling* and *Inferior* Foliage, as they are diſtinguiſh'd by Workmen in the three above named Diviſions of the *Calathus*; but inſtead of thoſe *Helices*, at our *Corinthian* Horns, the *Compoſita* has her *Voluta* much more reſembling the *Ionica*, and in lieu of *thoſe*, divers Capricious Fancies, as *Horſes Heads*, *Eagles*, and the like; *ſed ea doctis non probantur*, they are rejected by all good *Architects*, ſays *Philander*. *Voluta* is likewiſe among the Ornaments of *Mutuli*, *Curtouſes*, &c.

Now the *Center* or *Eye* of the *Ionic Voluta* is made by *Artiſts* with a *Cathetus*, which (not over nicely to diſtinguiſh from *Perpendicular*, because the Operation of them proceeds from diſtinct Terms) is meant by a *Line* let down from above, interſecting the Line of the *Collar* (as 'tis demonſtrated in *Chap.* 24. of the *Parallel*, with the *Hiſtory* of its Inveſtigation) and that ſmall Circle at this Point of *Interſection* is Metaphorically *Oculus*, the *Eye*, from whence the Perfect turning of the *Voluta* has been after an exquiſite manner (tho' by few obſerv'd and practis'd) found out; it being here indeed that our *Workman* will be put to the Exerciſe of his *Arithmetic*, as appears by that accurate Calculation in *Nicholas Goldmanus*'s Reſtitution of this becoming Ornament. Laſtly, *Cathetus.*

The *Abacus* (from ἄβαξ or ἀβάκιον which ſignifies a Square *Trencher*, or *Table*) is that *quadrangular* piece commonly accompanied with a *Cymatium* (except in the *Tuſcan*) and ſerving inſtead of a *Corona* or *drip* to the *Capitel*, whereof it is the *Plinth* and Superior, as has already been noted. This it is which ſupports the neather *Face* of the *Architrave*, and whole *Trabeation*: In the *Corinthian* and *Compoſita* the *Corners* of it are nam'd the *Horns*, and are ſomewhat blunted and hollowed, the Intermedial *Sweep* and *Curvature* with the *Arch*, has commonly a *Roſe* or ſome pretty *Flower* Carv'd in the middle of it. *Abacus.*

Thus we have finiſhed that *Head* of our *Column*, which being taken in *General* for all theſe *Members* together, is commonly diſtinguiſh'd by the Name of *Capitel* (an Eſſential Member of every Order:) taken, I ſay, for the intire Ornament from the *Aſtragal* and firſt *Cincture* of it, to the *Plinth* which bears up the *Architrave*: But it is not to be omitted, that the main Body of the *Corinthian* *Capitulum.*

Chapiter (of which we have given a large Deſcription under the *Title* of *Voluta*) conſiſts of a *Bell*, or *Basket* rather, which is that plain and ſolid part under the *Cauliculi*, *Stalks*, and out of which they are Carved with *Helices*, *Tendrels* and *Flowers* already mentioned, and which in order to their triple *Series* of *Foliage* (which ſeems to include and ſhadow the Body of it, as 'tis repreſented in that curious deſign of *Callimachus*'s Invention) is divided into *three* equal Parts: But of this hereafter. There is likewiſe another *Capitel*, or rather a Diminutive of it, by the *Greeks* call'd κεφαλίδιον, which does not only ſignifie (as ſometimes) the former *Calathus* and *Basket*, but more properly that *Braid* or *Liſt* above the *Triglyph* in the *Freeze*.

Moreover, to the Bodies or *Shafts* of ſome *Columns* appertain

Striges. *Striges*, which (not to inſiſt upon what the Learned *Voſſius* and other *Critics* have contended) are thoſe excavated *Channels*, by our Workmen call'd *Flutings* and *Groeves*: Theſe are particularly affected to the *Ionic* Order (rarely the *Doric*) *uti ſtolarum rugæ*, in imitation of the *Plaits* of Womens *Robes*, as our *Maſter* reſembles them; and ſome of theſe *Channels* we find to go winding about

Striæ. *Pillars*, &c. but it is not approved. Between *theſe* are the *Striæ*, we may properly *Engliſh* them *Rays* or *Liſts*; which being twenty in the *Doric*, in the *Ionic* 24 in number, are thoſe plain Spaces between the *Flutings* in the *Ionic*, *Doric*, *Corinthian* and *Compoſed* Orders; which *Ornament* the *three* laſt have (with ſome ſmall Difference) borrow'd from the *Ionic*. And in ſome of thoſe (as in that *Dioclefian Doric* Example) they are *ſo* made, as to reduce the *Rays* to a ſharpe Edge only, by their Contiguity, without any Spaces at all. But ſometimes we find the *Striges* to be fill'd up with a Swelling, a third Part from the *Baſe*, and theſe we may call *Stav'd*, or *Cabl'd Columns*; for ſo I think fit to Interpret the *French Embaſtone*, and *Alberti's Rudens*. Thus we find ſome *Corinthian* Pillars often treated; the *Stria* being commonly a third or fourth Part of the wideneſs of the *Flutings*, (in the *Doric* not too deep) and diminiſhing with the *Contraction* of the *Scapus*, unleſs the *Shaft* be very high, in which Caſe the diſtance does it without the Aid of the Workman; ſometimes alſo we have ſeen them totally filled, and ſometimes wrought, but better plain: Note that where they exceed Twenty or Twenty four they make the *Columns* appear Gouty. We ſhould now come to the *Entablature*, but a Word of

Paraſtatæ. *Pillaſters*, or ſquare *Columns*, call'd by the *Greeks* (if ſtanding ſingle) *Paraſtatæ*, or by the *Italians Membretti*. Obſerving the ſame *Module* and Ornament in *Baſe* and *Capitel* (if alone) with that of the intire *Column*; but ſo they do not for their *Prominencie*, which being to gain room and to ſtrengthen Works (Fortifie and Uphold capacious Vaults) reduces them ſometimes to the *Square*, whereof one of the ſides is frequently applied to *Walls*, by which alone ſome will

will only have them to differ from *Columns* themſelves ; but that ought to be underſtood of ſuch as have no *Impoſts* and *Arches*, upon which occaſions the *Lights* they let in do much govern their Proportions, as *Palladio* has Judiciouſly ſhew'd in *l.* 1. *c.* 13. &c. Likewiſe, where they happen to be at *Angles*, and according to the ſurcharg'd weight ; and therefore a *Ruſtic* ſuperficies (as Sir *H. Wotton* has Diſcreetly obſerv'd) does beſt become them, as well as a greater Latitude, for ſo they have ſometimes been enlarg'd to almoſt a whole *Vacuity* ; unleſs where for their better Fortifying, we find *half*, and ſometimes whole *Columns* applied to them. As to the Extancy, ingag'd in the Thickneſs of the Walls, (for ſo we muſt ſuppoſe them to be) they ſometimes ſhew above a Fourth, Fifth or Sixth Part of their Square, but this is Regulated according to the Nature and Difference of the Work, which not ſeldom reduces it to an *Eighth*, without any nice Regards to what were requiſite if they ſtood alone, ſeeing they are often deſtin'd to Stations which require the moſt ſubſtantial Props. For the reſt, they carry the ſame Proportion with their reſpective Orders, and are very rarely *Contracted*, unleſs where they are plac'd behind whole *Columns* : If *Fluted*, with not above Seven or Nine at moſt : Be this alſo obſerved ; That as in the *Fronts* of Large and Noble Buildings, they ſhew very gracefully, being plac'd one over the other before the firſt and ſecond *Stories* ; ſo in leſſer *Fronts* and Houſes they look but poorly : Laſtly, be this farther Noted ; That tho' we find the *Doric Pillaſter* with *Trigliph* and *Metap* plac'd about the *Cupola*, 'tis by no means to be broken in any ſort, to humor the Angle of an *Upright Wall*, tho' there happen to be a *Cornice* above it, as we frequently find, allowing half to one *Face*, and as much to the other.

Pillaſters are likewiſe ſmaller or ſhorter applied to *Balconies*, &c. with now and then *Baſes*, *Plinth* and *Capitel*, and ſo in Rails upon Stairs, *Battlements*, &c. They alſo do properly and handſomely where they are ſet to ſupport *Cornices* and *Freezes* in *Wainſcoted* Rooms ; provided their due proportion be obſerv'd, without thoſe ridiculous Diſguizements of *Pedeſtals* and Idle fancies commonly wrought about them : They alſo well Adorn *Door-Caſes*, *Chimney-Pieces*, *Gallery-Fronts*, and other places, whence they are call'd

Ante, not improperly (as *Monſ. Perault* ſhews) from the *Latin* *Antæ*, for their being plac'd *Before* the Antient *Temple Walls* and Coines ſtanding out to ſecure them, and ſo at the ſides of *Doors* : In ſhort, they are generally own'd among *Pillaſters*, obſerving the ſame Rule in advancing out of the Work, as *Columns* themſelves alſo do ; otherwiſe (as was ſaid) *Pillaſters* us'd to appear very little beyond the Perpendicular of the Wall or Work, where there happen'd to be no *Ornament* above, which ſallied farther, in which caſe, the Projecture of both ought to be alike, or rather comply with that of the *Pillaſter*. The *Antæ.*

Impoſts

Incumba. *Impoſts* (by *Vitruvius* call'd *Incumbæ*) which I mention'd, are nothing but their *Capitels* or more protuberant Heads, upon which reſt the ends of the *Arches*; which alſo muſt conform to their *Orders*; ſo as the *Tuſcan* has a *Plinth* only; the *Doric*, two *Faces around*; the *Ionic* a *Plancere* or Cavity betwixt the two *Faces*, with now and then carved Mouldings, as has likewiſe the *Corinthian* and *Compoſita* a *Freeze*; ſo as the *Sallies* of the *Impoſts* exceed not the Body of the *Pillaſter*: Sometimes again the *Entablature* of the Order ſerves for the *Impoſt* of the *Arch*, which is very Stately, as we ſee in divers *Churches*, to which the height exceedingly contributes, where the Projecture is ſuitable; in the mean time where they exceeded the *Square* and regular Thickneſs, they were nam'd

Pilæ *Pilæ*, and their *Quadra*'s or *Tables* (as we yet ſee them in antient *Altars* and *Monuments*) were employ'd for *Inſcriptions*; but if ſhorter, and more Maſſy, they ſerve for the *Arches* of *Bridges*, for *Buttreſſes* and the Suſtentation of more ſolid Works, as indeed they need to be, ſtanding in the Water; and gradually built as far as its Level; nor ought their Breadth be leſs than a *Sixth* part of the Wideneſs of the *Arch*, nor more than a *Fourth*: They were ſometimes made half Circular; but the *Antients* preferr'd the pointed at *right Angles* as better to reſiſt the impetuous Current, before the more Acute and Sharper.

Camera. *Arches* or *Vaults* conſiſting generally of ſimple *Half-Circles*, and now and then of ſome leſſer *Point*, of all other, require the Conduct of an able *Architect* well Skill'd in *Geometry*: I ſhall not need to Criticize

Fornices on the ſeveral *Species*, of *Fornices* and *Cradle* Works, as of late Subdivided into more than we find among the Antients, which were not above Three or Four: The ſimple *Fornix*, or *Hemicircular*, Strait or Turning: The *Teſtudo* or more circular, and that which by the *French* is call'd *Cul de Four* and *Oven*-like; and the *Concha*, which like a Trumpet grows Wider as it Lengthens, *&c.* Of theſe ſome are ſingle, ſome double, croſs, *Diagonal*, *Horizontally* on the Plain, others Aſcending and Deſcending, Angular, Oblique, Pendent; ſome that Sallie out ſuſpending an incumbent Burden, of which there are both Concave and Convex, as for the giving Paſſage under upon Occaſion: But of whatever Form, or Portion of the *Circle*; Care muſt he had, that where they croſs, the *Reins* or Branches ſpringing from the ſame Point, and their Moulding alike, they neither crowd too near one another, nor intangle confuſedly; but meeting from Angle to Angle, unite at the Key-ſtone, which is commonly carv'd with a Roſe or ſome other Ornament; it being in this Diſpoſition of the *Nerves* and *Branches*, wherein conſiſts the Artiſts great Addreſs, and that the *Concamerated* Spaces be exceeding cloſe Joynted, needing no Pegs or fillings up with Mortar; and above all, that the Butments be Subſtantial: As now in *Cellars*, *Churches*,

Churches, &c. *Vault* and *Arch*-Work in warmer *Climats*, both in the First and Second Stories, not without frequent and costly Sculpture, various *Fretts* and Compartments, of which we have Examples *Antient* and *Modern* far more Rich, Grave, and Stately, than those *Gothic Soffits*, gross and heavy, or miserably trifling: Another great Address in *Vault-Work* is to render them light and cheerful, where they are rais'd above Ground, as well as Solid; especially, where there is occasion to contrive them as flat as possible; such as are to be seen in many *Bridges*, especially at *Pisa* over the *Arno*, so flat as the *Curvature* is hardly discernable; and tho' it consists of three *Arches*, yet they are very large; and there are many at *Venice*, but not near of that Length; That of the Famous *Rialto* over the *Grand-Canale*, is more exalted, being in the *Base* near 200 Foot, the *Chord* much less than half the *Diameter*, *Arches* being ever strongest, as they approach the half Circle: The *Masonry* at the Front of these being cut by a peculiar *Slope* of the *Stone*, is call'd *Pennanted*, till it come to joyn with the

Mensula which (*quasi* μέσα seems to be locked to the *Pennants* in Guize of a *Wedge*, and therefore by our Artists nam'd the *Key-stone*: we have shewed their use where two *Arches* intersect, which is the strongest manner of *Cameration*. Under the Title of *Arch-Work*, may not improperly come in those *Scalæ Cochlides*, *Spiral*, *Annular*, *Oval*, and of whatsoever Shape, *Pensile*, and as it were, hanging with or without *Column*, receiving light from above; all of them requiring the Skilful *Geometrician*, as well as a *Master-Mason*; Stairs in general being one of the most useful and absolutely necessary Parts of an House; and therefore to be contriv'd with good Judgment, whether of Stone or Timber; and so as with *Ease* and *Cheerfulness* one may be led to all the Upper Rooms. With *Ease* I mean, That the *Flights* be not too long, before one arrives to the *Reposes* and *Landings*, without criticizing concerning the Number of Steps (which the Antients made to be odd) provided they exceed not 5 *Inches* in *Height*, or be less than 15 in *Breadth*, one Foot being scarcely Tolerable: And albeit the Length cannot so positively be determin'd, but should answer the Quality and Capacity of the Building; it ought not to be shorter than *Five* and an *half*, or *Six* Foot; that two Persons may commodiously ascend together; I speak not of those *(Scalæ occultæ)* Back-Stairs, which sometimes require much Contraction (and are more obnoxious to Winding Steps) But a Noble and Ample House may extend even from 8 to 12 Foot in Length. And *here* I think not amiss to Note, That the *Antients* very seldom made use of *Arched Doors* or *Windows*, unless at the entrance of *Castles*, *Cities*, and *Triumphal Intercolumnations* for the more Commodious Ingress of *Horse-Men* arm'd with *Spears*, and *Ensigns*, &c. This *Barbarity* therefore we may look upon as purely *Gothic*,

Mensula.

Cameratæ

Scalæ.

who conſidering nothing with *Reaſon*, have introduc'd it into private Houſes, and been imitated but by too many of our late *Architects* alſo, to the no ſmall Diminution of the reſt which is better Conducted. By *Intercolumnations* I do likewiſe Comprehend all *Terraced* and *Cloiſter'd* Buildings, *Porticos*, *Galleries*, *Atria's*, &c. as before, contiguous to, or ſtanding out from the Body of *Edifices*, in which Caſes they are becomingly proper: And this does naturally lead me to our *Pillars* again, and to conſider the *Spaces* between them.

Intercolumnation (antiently much the ſame in all the *Orders* without *Arches*, where Spaces may be wider than betwixt ſingle *Columns*) ſignifies the diſtance or void between *Pillar* and *Pillar*, but this not ſufficiently explaining the various Diſtance of the ſeveral Orders in Work, renders it, even in divers of our *Engliſh* Authors where they treat of this *Art*, of ſundry Denominations: For *thus* it was uſually call'd

Intercolumnatio.

Inſulata Columna, where a *Pillar* ſtood alone like an *Iſland* or Rock in the *Sea*, the one inviron'd with *Air* as the other with *Water*.

Inſulata.

Areoſtylos belonging chiefly to the *Tuſcan Order*, was where the *Intercolumnation* is very wide, as at the entrance of great *Cities*, *Forts*, &c. upon which occaſions at the leaſt four or five Modules (taken for the whole *Diameter*) may be allowed, and commonly requires a Timber *Architrave*. Others almoſt contrary, when they ſtand at only a moderate Diſtance.

Areoſtylos.

Diaſtylos, though ſometimes improperly taken for any *Intercolumnation*, is moſt natural to the *Doric*, and may have three or four *Diameters*, nay ſometimes more in the *Ionic*, as fitteſt for *Gates*, *Galleries*, and *Porches* of *Pallaces* or leſſer Buildings, and thence were call'd *Tetraſtylos* and *Hexaſtylos*.

Diaſtylos.

The *Syſtylos* nam'd alſo *Pycnoſtylos* (as much as to ſay *thick of Pillars*, becauſe ſeldom allow'd above a *Module* and an half, though ſome diſtinguiſh the firſt by an half *Module* more for the *Corinthian*) belongs chiefly to the *Compoſita*, and it was us'd before *Temples*, and other Public and Magnificent Works of that Nature: As at preſent in the *Periſtyle* of St. *Peter*'s at *Rome*, conſiſting of near 300 *Columns*; and as yet remain of the Antients, among the late diſcover'd *Ruins* of *Palmyra*. But where in ſuch Structures the *Intercolumnation* did not exceed two *Diameters*, or very little more, (as in the *Corinthian* and eſpecially the *Ionic*) the Proportion of Diſtance was ſo Eſteemed for its Beauty and other Perfections, that it was by a particular Eminence termed *Euſtylos*, as being of all other the moſt Graceful: But it is not now ſo frequent as of old, to be at that vaſt Charge, as the Number and Multitude of *Columns* (which were uſually of one intire Stone exceeding all the other Parts and Ornaments of Building;) would ingage the moſt opulent *Prince*: Whilſt we find thoſe enormous Structures

Syſtylos. Pycnoſtylos

Euſtylos.

Structures, of *Temples*, *Amphitheaters*, *Naumachia*, *Circus*, *Baths*, *Porches*, *Tribunals*, *Courts*, (and other places of Public Convention) were built and advanced not only by the general Contribution of the People, or out of the *Fisch* and charge of the State: But very often by the *Munificence* of *Emperors*, who (glorying in nothing more, than in that of Beautifying and adorning of the moſt famous Cities in the ſeveral Provinces) us'd to Imploy *Thouſands* of their *Slaves*, to hew and work in the *Quarries*, abounding with all ſorts of the richeſt *Marbles*, or with *Serpentins*, *Ophites*, *Prophyrs* and ſuch as for hardneſs and difficulty of Poliſhing, our Tools will now hardly enter: And when the *Pillars*, (and *Attire* about them) were finiſh'd, to ſend and beſtow them *Gratis*, towards the Encouragement and Advancement of thoſe Public Works, &c. But after this *Conſtantine* the *Great*, meditating the Tranſlation of the *Imperial* Seat (from the *Weſt* to the *Eaſt*) took another Courſe (tho' by no means ſo Laudable) Cauſing moſt of the moſt Magnificent Buildings to be deprived of their *Columns*, *Statues*, *Inſcriptions*, and Nobleſt Antiquities, to be taken away, and carried to *Byzantium* (now *Conſtantinople*) to adorn his new *City*, with the *Spoils* of *Rome*; whilſt what Ruins and Fragments were left, (and had eſcap'd the Savage *Goths* and *Vandals*) were ſtrip'd of all that yet remained of Venerable and Uſeful Antiquity, by the ſucceeding *Pontifs*, for the Building of Stately *Palaces*, *Villas* and *Country-Houſes* of the Up-Start *Nepotiſme*, as are ſtanding both at preſent in the *Cities*, and the Sweeteſt and moſt Delicious Parts of the Country about it; Proud of what yet ſtood of the Miſerable demolition of *Temples*, *Arches*, *Mauſoleas*, &c. So juſtly *Perſtring'd* in that Sarcaſme, *Quod non fecerunt Barbari*, *fecerunt Barbarini*, and indeed, the ſuperls *Palaces*, of *Card. Antonio*, *Panfilio*, &c. Nephews to *Pope Urban* the VIII. and his Succeſſors, are Inſtances of this: So as I hardly can tell of any one antient Structure, (not excepting the *Pantheon*) but what has ſuffer'd ſuch ignominious Marks and Diſguiſes; As that the Learned *Author* of the *Parallel*, together with all the Aſſembly of the moſt Skilful *Artiſts*, (which he has brought together) have hardly been able, (with infinite Pains, Charge and Induſtry) to recover the juſt Proportions, and neceſſary *Adjuncts* of the *Antient Orders*. But to return where we left ſpeaking of *Columns*; we are not there obliged to reckon any of them, as meaning different *Orders*, Kinds or *Species* of Building (as in the following Enumeration) but as relating to the ſeveral diſpoſitions of them, agreeable to their *Intercolumnation*. For where the ſides had ranges of *Columns*, as in thoſe large *Xyſtus*, *Temples*, *Porticos*, *Atrias* and *Veſtibula* of the *Greeks* and *Romans* (which were certain Arched or plainly *Architrav'd* Buildings in form of *Cloyſters* and *Galleries*, commonly ſtanding out from the

the reſt of the *Edifice*, and now and then alone, and within alſo) the *Antients* named no fewer than *Seven* ; according as they were applied to the ſeveral *Species*, *Diſpoſition* or *Compoſition* of the Fabric ; or more plainly, ſuch as were more proper for a *Temple*, according as it was built and plac'd deſignedly for more or fewer Ranks of *Columns*, at the entrance only, on every ſide about it, without or within ; not regarding their Proportion or Ornament, which is a different Conſideration (for ſo I think *Vitruvius* may be taken.) Of theſe The Firſt is

1. *Antes*, of which we have already ſpoken.

2. The *Proſtyle*, whoſe Station being at the Front conſiſted of only four *Columns*.

3. *Amphiproſtyle*, where the Building had a double *Pronaos* or Porch, conſiſted but of four at each.

4. *Periptere*, where the *Columns* range quite about the Building : Six in Front, the *Intercolumnation* two *Diameters* of whatever *Order* it Conſiſt : the Pillars ſtanding downward.

5. *Pſeudodiptere* (Baſtard or Imperfect) as conſiſting of a ſingle Rank only, yet of eight *Columns* in Front at two *Diameters* diſtance ; ſo as left ſpace enough for another row from the main Building : Whereas the

6. *Diptere* has a double row of as many quite about, and *Octoſtyle* in Front alſo, at the Diſtance of *Euſtyle*, that is, two *Diameters* and a Quarter ; This made as it were a double *Portico*, which we call *Iſles*. Laſtly, the

7. *Hypethre*, conſiſts of two Ranks of *Columns* all about, with Ten at each Face of the Building, and a *Periſtyle* within of ſingle *Columns* ; the reſt being expos'd to the Air, that is not walled in, (and placed as the *Pycnoſtyle* cloſer to one another) we have call'd *Periſtyle*, which tho' importing a *Colonade*, or Series of *Columns* ranging quite about ; yet are not all which are ſo plac'd to be call'd ſo, unleſs ſtanding *within* the Walls, which is Eſſential to their Denomination ; ſince otherwiſe, as well the *Periptere*, as *Monoptere* (both conſiſting but of a ſingle Range or Wing a-piece) ſhould then be *Periſtyles*, which they are not : Beſides, the *Monoptere* is only where a *Roof* is ſupported without any Wall or Cloſure whatſoever, as in that Example of *Vitruvius*, Lib. 4. Cap. 7. All which I have only mention'd for the Benefit of our Country *Workmen*, who do frequently, even amongſt our *Engliſh* Tranſlators of *Architectonical* Treatiſes, meet with thoſe hard Names without their Interpretation, when the Diſcourſe of theſe open and Airy *Ornaments*, whether adjoyning to, and ſupporting more *Contignations* and *Stories* ; or invironing them, and prominent from them ; and becauſe it is for this, that our Maſter *Vitruvius* ſo paſſionately wiſhes that his *Architect* ſhould be (as of old they ſtyl'd *Callimachus*) *Philotechnos*,

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an induſtrious ſearcher of the *Sciences*, which is the ſame that a good *Philologer* is amongſt our *Literati*.

Moreover inſtead of *Columns* the *Antients* (as now the *Modern* but too often) uſed to place the whole Figures of *Men* and *Women* to ſupport and bear up intire *Cornices*, and even huge Maſſes of Buildings; but of this at large in *Cap.* 22, 23. of the *Parallel*, Part 1. Theſe they alſo nam'd *Telamones* or *Atlas*'s, the *French Conſoles*, where they uſually ſet them to ſuſtain the *Architrave*, which for being the next *Member* in order to the *Capitel* we come next to Explain. *Architrave*

The *Greeks* nam'd that *Epiſtilium*, which we from a mungril Compound of two Languages ἀρχη ---*Trabs* (as much as to ſay the principal Beam and Summer, or rather from *Arcus* and *Trabs*,) call *Architrave*; *Ut velint trabem hanc Arcus vices ſuſtinere qui a Columna ad Columnam ſinuari ſolet*, as *Baldus* with reaſon from its Poſition upon the *Column*, or rather indeed the *Abacus* of the *Capitel*. It is the very firſt Member of that which we call *Entablature* in our Tranſlation of the *Parallel*; and formerly in the *Tuſcan* Order framed for the moſt part of *Timber* in regard of the diſtant *Intercolumnation*: It is alſo frequently broken into two or three diviſions, call'd by Artiſts *Epiſtylium*.

Faſcias, or rather, plain *Faces*, a little Prominent, the loweſt being ever the narroweſt: Theſe *Breaks* arriving ſometimes to 17, ſometimes to 18 *Minutes* in breadth, ſome rather chooſe to call *Faces* than *Faſcias*, *Swathes*, *Fillets* or *Bands*, by which they are uſually diſtinguiſh'd into *Firſt*, *Second* and *Third*, eſpecially in the three latter *Orders*; for in the *Tuſcan* and *Doric* they do not ſo properly enter, though our *Parallel* yield us two approv'd Examples: Theſe are frequently, and indeed for the moſt part, ſeparated with a ſmall *Aſtragal* cut into *Heads*, or ſome ſuch ſlight Carving; the *Faſcias* of the *Architrave* likewiſe curiouſly wrought, as in that wonderful Inſtance of a *Corinthian Entablature* taken out of *Dioclefian*'s Bathes. *Faſcia*, in the Notion I would rather take it, ſhould be for that narrower *Band* about the *Tuſcan* and other *Baſis* as ſome call it; or rather the ſquare Liſt under the ſuperior *Torus* in ſome *Pedeſtals* nam'd *Supercilium*, and not properly the *Torus* it ſelf, as in divers *Engliſh Profiles* they erroniouſly make it; for *Supercilium* ſeems to be a kind of *Corona* or *Drip* to the Subjacent Members. In *Chimneys* the *Architrave* is the *Mantle*; and over the *Antepagmenta* or *Jambs* of *Doors* and *Lintels* of Windows the *Hyperthyron* which the *Italians* call *Soppra frontale*, and our *Carpenters* the *King-piece*, immediately under the *Corona*, as a large Table to ſupply the *Freeze*; eſpecially in the *Doric* Order, and chiefly over *Portics* and *Doors*; Whilſt as to the preciſe Rule for the *Fillet* of the *Architrave*, the *Tuſcan* Challenges one; the *Faſciæ*. *Supercilium*. *Antepagmenta*. *Hyperthyron*.

the *Doric* and *Compoſita* two; the *Corinthian* three; ſometimes interrupted to let in a *Table* for an *Inſcription.*

The uppermoſt *Faſcia* of the *Architrave* for the moſt part is, and indeed always ſhould be (the *Tuſcan* only excepted) adorn'd with a

Lyſis. *Lyſis*, or

Cymatium. *Cymatium* inverted, which is no more than a wrought or plain *O-gee* as our Workmen barbarouſly name it; The term is Κυμάτιον *undula*, and ſignifies a *rouling Wave*, to the reſemblance whereof it is moulded. By ſome it is call'd the *Throat*, as from the *Italian* and *French*, *Gola*, *Geule*, or *Doucine*, and of theſe there are *two* kinds, the *Firſt* and principal hath always its Cavity *above*, and doth conſtantly jett over the *Corona* or *Drip* like a *Wave* ready to fall, and then is properly call'd *Sima*; the *other* has its hollow below, and is

Sima. nam'd *Inverſa*, the one *Convex* the other *Concave*: The Letters ∫ thus placed do reaſonably well expreſs theſe kind of *Mouldings*, which not only enter into the Member of the *Architrave* where 'tis ever *inverted*, but (as we ſaid) perpetually above the *Corona*, where they do frequently encounter and meet together with a ſmall *Regula* between them, which as it were ſeparate the parts, as the *Freeze* from the *Cornice* and the like; but then the neather is the *Lesbyan* ever *reverſed*, and very narrow; though oft-times both of them Carv'd and Adorn'd with *Foliage*, &c. In the *Doric* Order the upmoſt *Cymatium* of the *Entablature* is ſomewhat different, as conſiſting but of a ſingle hollow only under the Liſt: In the mean time, there is no ſmall nicety among *Architects* about this neceſſary Ornament, both as to the Name and placing; giving to the *Larger* the Name of *Cymatium* revers'd, or *Doucine*; to the *Smaller*, that of *Simus*, or Flatnos'd; commonly plac'd beneath the other, under a ſmall *Fillet*; yet not ſo eſſentially, but that it has been ſupplied by the *Aſtragal*: However the moſt natural place of the great *Cymatium*, is upon the ſuperior *Cornice*, where our *Maſter* gives it the Name of *Epiſtheates*, and ſhould ever cover the ſloping ſides of *Frontoons* or *Tympanum.*

Cymatium is alſo about the Heads of *Modilions*, and conſtitutes part of them, as likewiſe it enters into *Abacus*, and on *Pedeſtals*, as in *Stylobatæ Corona*, and the *Baſe* thereof, where we find them both *inverted*; though I remember to have ſeen the upmoſt with the *Recta* alſo in the *Cornice* abovemention'd. But inſtead of *Cymatium* ſeparating the *Architrave* and *Freeze*, *Tænia* oftentimes ſupplies the room.

Tænia. *Tænia* is properly *Diadema*, a *Bandlet* or ſmall *Fillet* with which they uſed to bind the Head; and rather thoſe *Lemniſci* and rubans which we ſee Carv'd and dangling at the ends of *Gyrlands*. The Interpreter of *Hans Bloome* names it the top of a *Pillar*, but very inſolently; it being indeed the ſmall *Faſcia* part of the *Doric Architrave* (or as *Perault*, ſtrictly belonging to the *Cornice* alone) ſometimes

times (but ſeldom) with a narrow *Cymatium*, or *Regula* under it, as *that* runs under the *Triglyphs* as a kind of *Baſe*: Some call it the neather *Tænia* (as *Philander* frequently) to diſtinguiſh it from the *Bandage* which compoſes the *Capitelli* of the *Triglyphs* and continues between them over the *Metops*, and not ſeldom under a *Cavetto* or ſmall *Cymatium*, with which *Suidas* and other learned *Critics* many times confound it. In a Word, 'tis that in the *Doric Architrave*, which *Cymatium* is in the other Order, and ſeparates the *Epiſtylium* or *Architrave* from the

Freeze, the Word in *Greek* is ζωοφόρος, and does genuinely import the imaginary *Circle* of the *Zodiac* depicted with the twelve *Signs*; but by our *Architects* 'tis taken for the *Second* diviſion of the *Entablature* above the *Columns*, being like a Fair and Ample *Table* between the former *Teniæ*, and which though oftentimes plain ſhould be *Pulvinatus*, pillow'd, or ſwelling in the *Ionic* Order; but in the *Doric* enrich'd with the *Triglyph* and *Metops*, and with a Thouſand *Hiſtorical Symbolic*, *Groteſ.* and other flored Inventions in the reſt of the Orders (*Tuſcan* excepted) eſpecially the *Corinthian* and *Compoſita*, and ſometimes with Inſcriptions. Our term is deriv'd either from the Latin *Phrygio* a Border, or from the *Italian Freggio* which denotes any *Fring'd* or Embroider'd *Belt*: *Philander* ſays *a Phrygionibus*, not from the *Phryges*, a People of the *Minor Aſia*, as ſome erroneouſly; but *Phrygiones*, a certain *Broidery* or flowr'd *Needle Work*, as one ſhould ſay *Troy-ſtitch* (whence haply our *True-ſtitch*) in imitation whereof they wrought *Flowers* and *Compartiments* upon the *Freeze*; which is commonly no broader than the *Architrave*: In the *Ionic*, if plain, a fourth Part leſs; if wrought, a fourth larger, of which ſee more where we ſpake of *Ornaments*. *Freeze. Zophorus.*

Beſides *this* of the *Entablature*, the *Capitels* of both *Tuſcan* and *Doric* have the *Freeze* likewiſe commonly adorn'd with four *Roſes*, and as many ſmaller *Flowers*, for which cauſe 'tis called the *Freeze* of the *Capitel* alſo, as we noted, to diſtinguiſh it from the other; likewiſe *Hypotrachelium*, from its poſture between the *Aſtragal* and the *Regula* or *Annulus* of the *Echinus*: This *Tuſcan Freeze* is plain and very ſimple; but in the reſt of the *Orders* it is employed with the *Echinus*, as in the *Ionica*, and the *Capitel Cauliculi* or ſtalks in the other two; theſe *Roſes* are alſo ſometimes *Inſculped* under the prominent *Horns* or Angles of the *Doric Abacus*.

The *Triglyphs* which I affirm'd to be charged on the *Doric Freeze*, is a moſt inſeparable Ornament of it. The Word τριγλυφος in *Greek* imports a three-Sculptur'd piece, *quaſi tres habens Glyphas*: By their Triangular *Furrows*, or Gutters rather, they ſeem to me as if they were meant to convey the *Guttæ*, or Drops, which hang a little under them; though there are who fancy them to have been made in imitation of *Apollo's Lyre*, becauſe firſt put in Work (as *Triglyphus.*

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they affirm) at the *Delphic* Temple: You are to note that the two angular *Hollows* are but half *Chanell'd*, whence they are call'd *Semi-canaliculæ*, to diſtinguiſh them from the *Canaliculi*, whoſe Flutings are perfect, and make up the *three* with their *Interſtices* or Spaces, being as many flat and ſlender *Shanks*, for ſo we may interpret the *Latin Femora*: One of theſe is ever plac'd 'twixt two *Columns*, and ſhould be about the breadth of half its Diameter below: The *Italians* name them *Pianetti*, ſmall *Plains*, and ſo do we; and they conſtantly reach the whole *Diameter* of the *Freeze*, being crown'd with the formerly mention'd *Capitel*, part of the upper *Tænia*, and determining with the *neather*, where it intercepts them from the Prominent.

Gutta. *Guttæ* or *Drops*. It is certainly the moſt conſpicuous Part of the *Doric Freeze*, ſuppoſed to have been at firſt ſo Carved upon *Boards* only that had been clap'd on the Extremities of the *Cantheru*, *Joiſts* or *Rafters* ends which bore upon the upper *Faſcia* of the *Architrave*, to take off from the Deformity, as alſo were the *Triglyphs*: How indiſpenſably neceſſary they are both to be placed in a juſt and due *Square* from each other, and *Perpendicularly* over their *Columns*, the Author of the *Parallel* has ſhew'd: *Chap.* 2. *Part* 1. as in *that* of the *Temple* of *Solomon* according to *Villalpandus*'s Deſign, how they have been admitted into the *Corinthian Freeze*, but without the *Guttæ*; and ſo in the *Perſique*. Theſe *Guttæ* are as I ſaid thoſe ſix Appendant *Drops* or *Tears* affected only to the *Doric Order*, ſeeming as it were to trickle down and flow from the *Channels* and *Shanks* of the *Triglyphs* through the neather *Tænia*, and ſmall *Reglet* or Moulding under it.

Guttæ are ſometimes made in Shape of Flat *Triangles*, ſometimes ſwelling like the *Section* of a *Cone* or Bell, (but ſquare at the bottom) and therefore ſo call'd by the *French Architects*. They are alſo under the *Planton* and the *Modilions* which ſupport the Cornice, eighteen in Number, exactly over the *Triglyphs*, as in that moſt Conſpicuous elevation of the *Profile* after the ſtately Relique at *Albano* near *Rome*, than which nothing can be imagin'd more Noble and Magnificent. *Alberti* calls theſe *Guttæ*, *Clavos*, as conceiving them to be in Reſemblance of *Nails*, but without any Reaſon for his Conjecture.

Metopæ. *Metopæ*, are the next in Order, and are nothing elſe ſave thoſe empty Spaces in the *Freeze* 'twixt the *Triglyphs* in the *Doric* Order, either *Puræ* and Plain, or *Figur'd*, for that is not neceſſary always, to the great eaſe of *Architects*, who oftentimes find it ſo difficult to place them at juſt diſtances, that except in *Church*-Works, they frequently leave them out: The Word is deriv'd of μὲ and ὀπὴ which is *foramen*, *intervallum inter Sculpturæ cava*, or if you will, *Intertignium*, as importing here rather the forenamed *Spaces*, than what thoſe pretend

pretend who will fetch it from the μέτωπον or forehead of the Beasts whose Sculls (remaining after the *Sacrifices)* were usually Carved in these Intervals; because in these Vacuities were the Passages for the ends of the *Joysts*, *Timbers* and *Rafters* which rested upon the *Architrave*; and were to fill up that Deformity, they usually made it up with some such Ornaments, suppose of *Sculls*, *Dishes*, and other Vessels, nay sometimes with *Jupiter's Squib* or Thunderbolt, *Targets*, *Battle-Axes*, *Roses*, and such other *Trophies*, as was found most apposite to the occasion, and not preposterously filled them (as our Workmen too often do) without any Relation to the Subject; so as I have frequently seen *Oxes Heads* Carv'd on the *Freeze* of an *House* of *Pleasure* in a *Garden*, where *Roses* and *Flowers* would have been more proper. There are sundry other Ornaments likewise belonging to the *Freeze*; such as *Encarpa*, *Festoons*, and *Frutages* tyed to the *Horns* of the *Sculls* with *Tæniæ* and Ribbands tenderly flowing about this Member, and sometimes carried by little *Puti*, Boys, *Cupids* and a Thousand other Rich Inventions to be found in good Examples: But we are now arriv'd to the *third* and last Member of the *Entablature* separated from the *Freeze* by the superior *Tænia*, the *Cornice*.

The *Cornice*, *Coronis*, or as it is collectively taken for its several and Distinct *Mouldings* and *Ornaments*, comprehends a small 1. *Regula*, 2. *Cymatium*, 3. *Dentelli*, 4. *Ovolo* or *Echinus*, 5. *Modilions* or Bedding-mouldings which support the *Corona*, 6. *Sima recta* and *inversa* (rarely a *Cavetto*) 7. and lastly another *Regula* which concludes the whole *Order*. We will begin with the *First*, being sometimes a small *Scotia* consisting of an half or quarter round, that now and then also both in the *Tuscan* and *Doric* divides the *Freeze* from the *Cornice* in place of the *Tænia*, as does the *Cymatium* in the rest of the *Orders*. The *Coronis.*

Ovolo is next in the plainer *Orders*; but it is inrich'd in the *Corinthian* like the *Echinus*, which (if you please) you may take for the same thing in an *Italian* Dress, some like *Eggs*, some like *Hearts* with *Darts* Symbolizing *Love*, &c. In the *Tuscan* and *Doric* 'tis turn'd like a *Scima* or *Cymatium*, and is substituted for support of the *Corona*; but in the *last* 'tis usually accompanied with a slender *Regula* above it, and in the *Corinthian* both above and beneath, where it is likewise frequently Carv'd and adorn'd with a broad *Welt* like a *Plinth*. *Ovolo.*

Dentelli, are the *Teeth* (a Member of the *Cornice*) immediately above the *Cymatium* of the *Freeze*, by some named also *Asseri* from their square Form; I say in the *Corinthian* and *Ionic*, &c. for in the *Doric Order* they were not antiently addmitted, or rather not *Properly*, according to the Opinion of our *Master*, though we must needs acknowledge to have found them in the most Authentical pieces extant: *Denticulus.*

As for their *Dimenſions* they kept to no certain Rule, but made them ſometimes thicker, ſometimes thinner, ſquare, or long, and more in number; but commonly the *Spaces* leſs by an half, ſometimes by a third part than the *Teeth*, which were themſelves twice as *High* as their *Breadth*, and frequently (eſpecially in the more polite *Orders*) beginning with the *Cone* of a *Pine*, pendent at the very point over the Angular *Column*: *Lomatius* is yet more preciſe in this particular, and gives them as much height as the middle *Faſcia* of the *Architrave*, *Projecture*, equal, (ſomewhat too much) *Front* twice the Breadth of their Height, and a third part leſs than their Breadth for *Vacuity*. The *Dentelli* have oftentimes a ſmall *Regula*, and now and then more than one, as uſually in the *Ionica*, where it has likewiſe an *Ovolo* or *Echinus* for the bedding of the *Corona*; but if inriched, and that *two* of them encounter, *one* ſhould be ſimple and plain, as where it happens to be inſerted beneath it: Next to this ſuperior *Echinus* are the *Modilions*; but inſtead of them *Dentelli* are thought to have been firſt inſtituted, and for that Reaſon ſuperfluouſly joyn'd where *Mutules* are; and therefore where we find *Tænia* under *Modilions* it is not properly divided into *Teeth*, nor is it raſhly to be imitated, though we have ſome great Examples to countenance it. That of the *Pantheon* may ſafely guide us herein, where it is left *Plain* for this very Cauſe, and that the Reaſon of the Thing does not in Truth allow it: However, it muſt be acknowledged, nothing has been more groſly abuſed even amongſt our moſt renown'd *Maſters*.

Modilioni. *Modilions*, being certain ſupports in form of *Corbells*, *Cortouzes* and *Mutules* are a kind of *Bragets* to the *Corona*, and in thoſe *Orders* where they enter, ſupply the part of the *Bedding-moulding* as our Workmen ſtyle the *Ovolo* in this place; for ſo they frequently do in the *Doric* and *Ionic*, but then without any other Ornament than a ſlight *Cymatium* to edge them, and to be always placed over the *Triglyphs*: In the *Corinthian* and *Compoſita* (which is their true place) they are enrich'd with all the delicateneſs and curioſity imaginable (eſpecially in the *Corinthian*) capp'd, as I ſaid, with a curiouſly Carv'd ſmall *Cymatium*, where they are contiguous to the *Planceere* or Roof of the *Corona*. Our ordinary *Workmen* make ſome diſtinction between *Modilions* and thoſe other ſorts of *Bragets* which they call *Cartells* and *Mutules*, uſually Carv'd like the handles of Veſſels Scroul'd, Flower'd, and ſometimes Sculptur'd with the *Triglyph*; and ſuch were the *Ancones* amongſt the *Greeks*: And ſuch are often found ſupporting little *Tables* for *Inſcriptions*; the *Stools* of *Windows*, which jetty out, and Shields, and Compartments for Coats of *Arms*, &c. That there ſhould be no *Guttæ* under *Mutules* (or *Dentelli* under *Modilions*,) is the Opinion of divers learn'd *Architects*, though (as was ſaid) we frequently find them *Chanell'd*

like

like the *Triglyph*, and that in authentick Examples: *Philander* is for it, and pronounces them more proper than even under the pureſt *Triglyph*, for ſignifying (ſays he) *Canteriorum Capita, unde ſtillicidium fieri certum eſt*, drops and Iſicles commonly hanging at the ends of our *Rafters* upon every weeping Shower, whereas *Triglyphi* import only the *Projectures* of the *Beams* and *Timbers* nothing ſo much expoſed: But this I leave to the more Judicious: Whilſt as to their Shape, they ſhould be Square under the *Corona* at double their Breadth the Interval, and juſt over the middle of the *Columns*, how otherwiſe us'd, ſee in *Tympunum*, *Mutules*.

Mutules quaſi μυλω (a kind of *Modilions* alſo, or rather the ſame under an *Italian* term) have their Name from their Defect, as being made thinner and more abated below than above, and therefore naturally and diſcreetly deſtin'd to places where they are but little burthen'd with weight, as *here* under that little remainder of the *Cornice*, are to bear up, little *Statues*, *Buſts*, *Vaſes*, &c. and ſo where they are ſet under the *Pedaments* and *Lintels* of *Doors* and *Windows*: Moſt prepoſt'rous therefore and improper is our frequent aſſigning ſuch weak ſupporters to ſuch monſtrous *Jetties* and exceſſive *Superſtructures* as we many times find under *Balconies*, *Bay-Windows* and long *Galleries*; where inſtead of *Mutules* the *Antients* would have plac'd ſome ſtout *Order* of *Columns*: But by theſe unreaſonable *Projectures* (obſcuring the Lights of the Rooms under them) it comes to paſs, that in time our ſtrongeſt Houſes are deſtroyed, and drawn to their irrecoverable Ruin. For the proportion of *Mutules*, I commonly find them a Fourth Part higher than their Breadth, their *Intervals* being as wide as *two*; but neither do I find theſe ſo conſtantly regular, only that there be ever one plac'd at the *Corners* and returns of the *Corona*; and then if they interchangeably differ as to the Spaces, and as the *Rafters* direct, there are Examples abundant for their Juſtification: After all, they little differ from *Modilions*, ſave that they are moſt proper to the *Doric Cornice*, repreſenting and covering the ends of the *Rafters*, whereas *Modilion* ſerves for any Order. *Mutuli.*

I ſhall not need to define what is meant by *Projectures*, when I have ſaid it is the ſame our *Engliſh* Authors call the *Sailings* over and Out-*Jettings* of any *Moulding* beyond the upright Wall: The *Italians* name them *Sporti*, the *Greeks Ecphoras*, and for the ſame Reaſon all *Margints* whatſoever which hang over beyond the *Scapus* of a *Column* are *Projectures*; and for a general Rule it ſhould be equal to the breadth of what Projects, relation being diſcreetly had to the height, which beſt determines it. *Projectura.*

Corona, is next the laſt conſiderable *Member* remaining of the intire *Entablature*, and (tho' but a part only of the *Cornice*) ſeems indeed to ſet the *Crown* upon the whole Work: I ſay *Conſiderable*, *Corona.*

becauſe

becauſe being regularly plac'd ſo near the uppermoſt *Ovolo*, or *Mutules*; it ſerves to defend all the reſt of the *Edifice* from the *Rain* and injuries of the *Weather*, and therefore has its *Projectures* accordingly; and ſhould be one of the ſtrongeſt Square Members of the *Cornice*: It is ſometimes taken for the intire *Cornix* or *Cornice* with all its Ornaments, but *ſtrictly*, for that part of it above the *Modilions*, *Ovolo*, *Echinus*, or *O-gee* by a turn under the *Planceere*. We find the *Corona* omitted and quite left out of that ſtately *Arco di Leoni*, but it is worthily reproved by our *Author* of the *Parallel*, as being a Member of indiſpenſable uſe. *Corona* is by ſome call'd *Supercilium*, but rather I conceive *Stillicidium* the *Drip* (*Corona elvcollata Vite*) and with more Reaſon, ſo the *French Larmier*, *Gocciolatoio* and *Ventale* by the *Italians* to denote its double Office of protecting both from *Water* and *Wind*: For this reaſon likewiſe have our *Latin* Authors nam'd this broad *Plinth*, *Mentum* a *Chin*; becauſe it carries off the Wet from falling on the reſt of the *Entablature*, as the prominency of that part in Mens *Faces* keeps the ſweat of the Brows, and other liquid diſtillations, from trickling into the *Neck*; and in imitation hereof the Antient *Potters* invented the *brimming* of their *Veſſels*, by turning over ſome of the Ductile Matter when the *Work* was on the *Wheel*. Sometimes there have been two *Corona*'s in a *Cornice*, as in that *Corinthian* Inſtance of the *Rotunda*; and ſo it is frequently uſed in the *Stylobatæ* under *Gulæ inverſæ*; and truly it may be juſtly repeated, as the expoſure and occaſion requires (ſo it be not too near one another) all *Projectures* being but a kind of *Corona* to the Subjacent Members; and therefore their Projectures are accordingly to be aſſign'd, and by no means be cut and divided to let in *Window*, or *Tables*: *Corona* is alſo taken for the interior and exterior *Curvature* of an *Arch* or Vault.

Supercilium.

The under part of the *Roofs* of *Corona*'s (which are commonly wrought hollow, by ſometimes (as we ſaid) making part of the *Cymatium*) are by our *Artiſts* call'd *Planceeres*, and thoſe the *Cofers* wherein are cut the *Roſes*, *Pomgranades*, *Flowers* or *Fretts*, which adorn the *Spaces* betwixt the Heads of the *Modilions* and *Mutules*. This *Ceiling* the *Italians* name *Soffito*, and it ſignifies not only that part of *Corona* which ſallies over, but the *Lacunar*, *Lacus* or Plain of all other *Roofs* made of *Tabulations* and Boards appearing between the *Joyſts*, and which (as now, eſpecially in other Countries) were alſo formerly Gilded, Carv'd and moſt magnificently Embоſs'd with *Fretts* of wonderful *Relievo*; nay ſometimes to the Excels of Inlayings with *Ivory*, *Moſaique* and other rich and chargeable Works. *Pliny l.* 35. cap. 11. tells us of one *Pamphilius* the *Maſter* of *Apelles*, to have been the firſt which brought this *Roof-painting* into Vogue: But I refer the Reader who thirſts after more of this, to the Learned *Salmaſius* on *Solinus* p. 1215. Nor is yet the

Planceere. Cofers.

the *Corona* perpetually plain as we commonly ſee it ; ſometimes (though rarely indeed) I find it *Carv'd* alſo, as in that incomparable *Compoſita* of *Titus*'s Arch, and that of *Dioclesian*'s Baths in the *Corinthian* Order, and as is indeed every individual member of that intire *Entablature* to the utmoſt exceſs of Art ; but how far this may be imitable, conſult the Judicious *Parallel* ; while 'tis yet conſiderable that it is *there* but with a kind of *Sulcus* or Channel, in imitation of *Triglyph*, or a ſhort *Fluting* rather, being indeed more proper for the carrying off the *Water*, than any other Work could have been deviſed. *Corona* has over it a ſmall *Regula*, or an inrichment of ſome ſleight *Chaplet* in the *Corinthian*, &c. after which *Cymatium*, as in that of *Titus*'s Arch before rehearſed ; ſometimes likewiſe with an *Ovolo* or *Echinus* cut with *Ovals*, and *Darts*, (or as we call them *Eggs* and *Ankers*) as in that Example of *Nero*'s *Frontiſpiece*, and upon this again the double *Cymatium*, whereof the firſt is inverted, and ever the *neathermoſt* and moſt narrow, the other *Recta*, very large and prominent, being now and then adorn'd with *Lyons* Heads plac'd juſt oppoſite to the *Modilions* (of which ſee that curious reſearch of the Learned Dr. *Brown* in his *Vulgar Errors*) though ſometimes they are adorn'd with *Foliage* only. Laſtly, for a final *Coronis* or *Super-impoſition* (if I may be indulg'd ſo to name it) we are now climb'd to the moſt ſupream *Projecture*, and ultimate part of the whole Cornice, namely the

Regula, which ſome make a part of the *Sima* or *Gula Recta*, by *Palladeo* the *Intavolato*, and which I think to be the ſole *Member* which I never remember to have ſeen any where *Carv'd*, but always *Plain*, though in ſome of the *Orders* of near eight *Minutes* in breadth. It is very true, that *Scotia* (which I now and then call *Cavetto* or ſmall hollow) does in ſome laudable Examples ſupport this *Member* inſtead of *Cymatium*, but not ſo frequently ; and that the *Tuſcan Cornice* terminates in a *Cymatium* without this *Regula*, or rather in an *Ovolo*, as in thoſe Examples after *Sebaſtian Serlio*, &c. but it is not after a true *Guſto*, and the Fancy is particular. *Regula*, call'd alſo *Liſtello*, *Cincta*, &c. (of which ſomething already hath been ſpoken) is always that *Supercilium* or ſuperior Member of the *Cornice*, though it be likewiſe taken for that which is by ſome call'd *Quadra*, being thoſe two Liſts commonly including *Scotia*, as we find it in the *Ionic Spira*, both above and beneath : Sometimes alſo it ſignifies the *Rings* or ſmall *Feruls* begirting the *Scapus* of a *Column* near the *Apophyges*, or the *Plinth* of a *Pedeſtal* : Therefore I diſtinguiſh them, though yet they may be accounted the ſame, ſeeing they uſually import any ſmall plain *Fillet* dividing greater Members ; for ſo *Philander* calls almoſt all ſimple parts broader or narrower, which like *Fillets* encompaſs the reſt ; or rather as *Sycis*, ſeparates the Members from contiguity, both for variety and diſtinction,

Regula.

on, as in the *Doric-Trabeation*, *Regula*, *Sima*, *Cymatium*, &c. In the *Capitel*, *Regula*, *Cymatium*, *Plinthus*: In the *Cornice* of the *Stylobata* alſo *Regula*, *Cymatium*, *Aſtragalus*: But where it is no leſs conſpicuous, is in that part of the *Triglyph*, which jetts out under the *Taniæ*, and from which the *Guttæ* depend, where it ſeems to be a part of the very *Architrave* it ſelf. Laſtly, before I altogether leave the *Cornice* (which is indeed the top of all, and may be call'd the *Crown* of the *Corona* it ſelf) it may not be amiſs to add this ſhort Note, for *Joyners* and ſuch as make *Cornices* of *Wainſcot*, or *Fret-Work*, concerning the *Projectures*, which having relation to the Height, an Inch allow'd to every Foot ſuffice for a room of 15 Foot pitch, which is one Foot three Inches, where there is *Freeze* and *Cornice*, if much higher, and that there be the whole *Entablature*, each ſhall require a tenth part. To conclude, the very meaneſt Building, *Farm*, or *Out-houſe* deſerves a Moulding, *Cornice* with a *quarter round* or *Ovolo*, a *Cymatium* and *Fillet*.

Trabeatio. And may thus much ſuffice to have been ſpoken of the *Cornice* or upper *Member* of the *Trabeation*, which we mean by the *Entablature*, for both theſe terms ſignifie but one and the ſame thing, *viz.* The *Architrave*, *Freeze*, and *Cornice*: which I therefore the more preciſely note, becauſe ſome Writers apply it only to the very cover and upmoſt top of the *Orders*; but ſo does not our Country-man *John Shute*, whoſe Book being Printed *Anno* 1584. (and one of the firſt that was publiſhed of *Architecture* in the *Engliſh* Tongue) keeps rather to the Antient *Terms*, than by mixing them with ſuch *barbarous* ones as were afterwards introduc'd, indanger the Confuſion of Young *Students*, and ſuch as applied themſelves to the Art. Finally, to reform another miſtake, I think good to note that where we find *Coronix* in our Authors, it is rather meant for all that *Moulding* projecting

Cima. over the *Dye* or ſquare of the *Pedeſtal* (by ſome call'd alſo *Cima*) than this concluſive Superior Member of the *Entablature* which we name the *Cornice*. But I have done, nor needs there more be added for the perfect Intelligence of the moſt Minute *Member* and *Ornament* mentioned in this *Parallel*, or, I conceive, in any other *Author* whatſoever treating concerning this *Art*, and naturally applicable to the *Order*, by which we are all along to underſtand certain *Rules* and Members agreed on for the proportions and differences of *Co-*

Ordo. *lumns*, the *Characters*, *Figures* and *Ornaments* belonging to every Part and Member; whether bigger or leſſer, plain or inrich'd: Or as others, a Regular Arangement of the principal, and conſtituent Parts of a *Column*, from whence there Reſults that Compoſition which gives it uſefulneſs with Grace and Beauty. This for conſifting then of the ſeveral *Shapes* and *Meaſures*, obliges us to ſay ſomething more of *Proportion*, as being indeed the very Foundation of *Architecture* it ſelf; riſing as we ſhew, from the Repreſentation of Natural

Natural Things: Nor is it in this *Art* only applicable to the *Diſpoſitions* and *Kinds* of thoſe Edifices (which we have already ſpoken of) but to every individual *Member* of an *Order*, which *Vitruvius* will have taken from the Regular Dimenſions and Proportions of the parts of the *Humane Body*, in relation to any one moderate Meaſure of the ſame Body, differently multiplied in ſeveral Parts: As for Inſtance, the *Head* for an *Eighth* part of the whole; *Twice* from the point of one *Shoulder* to the other extream, *&c.* *Twice* in the *Arm*; four times from the *Hip* downwards, *&c.* Or as *Albert Durer*, by Multiplying the *Face* from the bottom of the *Chin*, to the upper part of the *Forehead*, reckons the whole length to be ten, *Et ſic de cæteris*; according to which the *Diameter* of a *Column* ſhall be ten times in the height of the *Corinthian*; the *Intercolumnation Euſtyle*, two and a quarter, *&c.* of which let the curious conſult our Maſter learned Interpreter, *lib.* 3d. *cap.* 1. where he Diſcourſes of *Poſitive* and Unalterable Eſtabliſhments; whilſt that which we mean by *Proportion* here, is the *Scale* by which all the *Parts* are Regulated as to their juſt *Meaſures* and Projectures; and this has by *Artiſts* been call'd the

Modul, or as *Vitruvius* (and ſome will have it) *Ordonation*; explained by *Modica commoditas*, to be taken for the *Parts* or *Quantities* by which the ſeveral Members of an *Order* are Calculated and Adjuſted in their Compoſition In the mean time to avoid all uncertainties and Perplexity of *Meaſures* differing in moſt Countries, ſome dividing into more, others into fewer Parts, to the great eaſe of both *Architects* and Workmen; by * *Moduls* is to be underſtood the *Diameter* or *Semidiameter* of a *Column* of whatever *Order*, taken from the Riſe of the *Shaft* or Superior Member of the *Baſe*, namely, at the thickeſt, and moſt Inferior Part of the *Cylinder*, from whence *Monſieur de Chambray* (following *Palladio* and *Scamozzi*) taking the *Semidiameter* divided into 30 equal Parts or *Minutes*, make it to be the *Univerſal Scale*: Now tho' *Architects* generally meaſure by the *whole* Diameter (excepting only in the *Doric*, which they reckon by the *half*) it makes no alteration here, ſo as the Workman may take which he pleaſes. We proceed next to the *Orders* themſelves: Nor let it be thought a needleſs Repetition, if having given the Learner (for to ſuch I only ſpeak) ſo Minute and full a Deſcription of all thoſe Parts and Members whereof the ſeveral *Orders* are compos'd and diſtinguiſh'd; I go on to ſhew how they are put together in Work, by what they have in common, or peculiar to denominate the *Species*, and bring the hitherto ſcattered and diſperſed Limbs into their Reſpective Bodies.

Modulus.

* *Note, that to diſtinguiſh it from* Model, *by which is ſignified the* Type *(or Geometrical repreſentation of a Building) this is to be read with the fifth Vowel, that by the Second.*

We have already ſhew'd (ſpeaking of *Capitels*) that a *Column*, which is ſtrictly the Naked *Poſt* or *Cylinder* only; does not aſſume the Name and Dignity of any *Order*, till compleatly qualified with thoſe

Parts

Parts and Acceſſaries, which give it *Name*, *Preeminence* and Rank; but being ſo diſtinguiſh'd, they are to *Architects* what the ſeveral *Modes* are in *Muſic*, and the *Carminum genere* among the *Poets*: All *Buildings* whatſoever coming properly under the Regiment of ſome one or other of them, or at leaſt, ought to do, and they are *Five*, (according to the Vulgar Account) namely, *Tuſcan*, *Doric*, *Ionic*, *Corinthian* and *Compoſita*: But ſince the *Firſt* and *Laſt* of theſe are not admitted by our great *Maſters*, as *Legitimat Orders* (to which indeed the Antient *Greeks* claim only Title) we might with *Vitruvius*, and our Author of the *Parallel*, leave them to bring up the Rear; did not *Cuſtom*, as we ſaid, and common uſe ſufficiently Juſtify our aſſigning this place for the

Tuſcan. *Tuſcan*, Ruſtic, or by whatever name dignified, or diſgrac'd; for being ſeldom found in the Antient Fabrics of the *Romans* themſelves, by which name it is alſo call'd; it ſeems yet to Challenge ſome regard from its reſemblance to thoſe plain and ſimple Rudiments of thoſe primitive Buildings, where they laid a *Beam* on the top of two forked *Poſts*, newly cut and brought out of the Foreſt, to ſupport that which gave Covering and Shade to the firſt *Architects*, ſuch as they were, and we have deſcrib'd; till Time and Experience, which Mature and Perfect all things, brought it into better Form and Shape; when the *Aſiatic*, *Lydians*, who are ſaid firſt to have Peopl'd *Italy*, brought it into that part of it, call'd *Tuſcany*: Nor let it altogether be deſpis'd, becauſe of its Native plainneſs, which rarely admits it into Buildings, where Ornament is expected; ſince beſides its ſtrength and ſufficiency (which might commute for its want of other Beauty, and give place at the Ports and Entrances of great Cities, Munitions, Magazines, Amphitheatres, Bridges, Priſons, *&c.* that require Strength and Solidity) we find it capable alſo of ſuch Illuſtrious and Majeſtic Decorations, as may Challenge all the Grecian *Orders* to ſhew any thing approaching it, ſo long as thoſe three Famous *Columns*, thoſe of *Trajan*, and *Antoninus*'s at *Rome*, and a third of *Theodoſius*'s at *Conſtantinople*, ſtand yet Triumphant, and braving ſo many Thouſands of the other *Orders*, which lie Proſtrate, buried in their Duſt and Ruins. Nor is this the firſt Example (as ſome pretend) as appears by that Antient *Pillar* erected to *Valerius Maximus*, Sirnam'd *Corvinus*; on which was plac'd a *Raven*, in Memory of what happen'd in the Famous Duel between that *Hero* and the Gygantic *Gaule*: Thus whilſt the reſt of the *Orders* are aſſiſted to ſupport their Charge and heavy Burdens by their Fellows, and a Conjugation of Entablature, (not allow'd to this) the *Tuſcan* ſtands alone like an *Iſland*, ſteady and as immovable as a Rock.

This

This *Column* with its *Base* and *Capitel*, is in Length *Seven Diameters*, taken at the thickeſt part of the *Shaft* below; the *Pedeſtal* one; the *Base* one *Module* or half Diameter, which divided into *Two* equal Parts, *one* ſhall be the *Plinth*, the other for the *Torus* and *Cincture*, which being but a fourth part of the breadth in this *Order* only, makes a part of the *Base* (peculiar to it ſelf alone) as in the other it does of the Shaft it ſelf.

The *Capitel* is one *Modul*, which divided into three equal Parts, one ſhall be for the *Abacus*, the other the *Ovolo*, the *Third* parted into *Seven*, whereof one is the *Liſt*, and the remaining *Six* for the *Column*: The lower *Aſtragal* is double the height of the *Liſt* under the *Ovolo*. Note, That *Vitruvius* makes no difference 'twixt the *Capitel* of this *Order* from the *Doric*, as to Proportions, tho' Artiſts diſpute it; who (as was ſaid) allow it a Semidiameter.

Now, tho' they have not granted it any fixt and certain *Entablature*, but choſen what they thought fit out of other *Orders*; yet they ſeldom give it leſs than a Fourth Part of the height of the *Shaft*, like the *Doric*, which commonly, and very properly, ſupplies the Place of the *Tuſcan*, and that with a great deal of more Grace, where they ſtand in Conſort, as in *Arches*, and the like: The diſtance or *Intercolumnation* of this *Order*, ſometimes amounting to four Diameters, ſometimes requires an *Architrave* of Timber; or if of Stone, to be plac'd much nearer, unleſs (as we ſaid) in Vaulting and underground Work, to which ſome almoſt wholly Condemn it.

The *Doric*, ſo nam'd from *Dorus* King of *Achaſis*, reported to have been the firſt who at *Argos* built, and dedicated a Temple to *Juno* of this *Order*, is eſteem'd one of the moſt Noble, as well as the firſt of the *Greeks*, for its Maſculine, and as *Scamozzi* calls it, *Herculean* Aſpect, not for its Height and Stature, but its Excellent Proportion, which fits it in all Reſpects, and with Advantage, for any Work wherein the *Tuſcan* is made uſe of, and renders that *Column* (among the Learned) a Supernumerary, as well as the *Compoſita*. *Doric.*

The *Doric*, *Base* and *Capitel*, challenges Eight *Diameters* ſet alone; but not ſo many by *One*, in *Porticos* and Mural Work.

The *Capitel* one *Modul*, with its *Abacus*, *Ovolo*, *Annulets*, *Hypotrachelium*, *Aſtragal* and *Liſt* beneath the *Capitel*, making a part of the Shaft or *Column*.

The *Entablature* being more ſubſtantial than in the reſt of the *Greek Orders*, requires a *Fourth* Part of the Height of the *Columns*; whereas the others have commonly but a *Fifth*.

The *Architrave* one Module, compos'd but of a ſingle *Faſcia*, as beſt approv'd, (tho' the Modern ſometimes add a Second) with a *Tænia* or Band which Crowns it.

The *Freeze* with its *Liſt*, which ſeparates it from the *Cornice*, is 1 Modl. $\frac{1}{4}$. The *Cornice* holds the ſame Proportion, with this Note, That when the *Column* is above 7 *Diameters*, both *Freeze* and *Architrave* have their Regulated Meaſure, one being of a ſingle *Module*, the other being *Three Quarters*, and the remainder being a fourth Part of the *Column* is caſt into the *Cornice*.

This *Order* had of Old no *Pedeſtal* at all, and indeed ſtands handſomely without it, but where it is us'd, *Palladio* allows it Two *Diameters* and a third of the *Column*, and is often plac'd upon the *Attic-Baſe*; for antiently it had none: We find it ſometimes *Fluted* with a ſhort Edge without *Interſtice*, as there is in other *Orders*; But that which is indeed the proper and genuine *Character* of the *Doric*, is (with very moderate Inrichment beſides) the *Trigliph* and *Metop* in the *Freeze*, with *Guttæ* in the *Architrave* beneath; the due Collocation and placing of which, often ſubjects our *Architects* to more difficulty, than any other Acceſſary in the other *Orders*; becauſe of the *Intercolumnation*, which obliges them to leave ſuch a ſpace 'twixt two *Columns*, as may not be leſs than for one *Triglyph* to five, counting what falls juſt on the Head of the *Columns*; which if plac'd at the entrance of a Building, the diſtance muſt be for *Three*; which to adjuſt is not very eaſy; ſeeing the *Intercolumnation* ought to correſpond with the diſtance of the Spaces of the *Triglyphs* and *Metops*; which point of Criticiſm, is the Cauſe we often find them quite left out in this *Order*, which ſuits ſo well in the *Pycnoſtyle* and *Acroſtyle*.

Ionica. The *Ionic*, invented, or introduc'd by *Ion*, ſent by thoſe of *Athens* with a *Colony* into that part of *Greece* bearing his Name, (and where he erected a Temple to *Diana*) conſiſts of proportions between the ſolid and manly *Doric*; the delicate and more Feminine *Corinthian*; from which it but little differs, ſave in the Matron-like *Capitel*: It contains Eighteen *Modules* or Nine *Diameters* (tho' by one leſs at firſt) together with the *Capitel* and *Baſe*, which laſt was added to give it Stature.

The *Entablature* is allowed a Fifth part of the height of the *Column* of which the *Baſe* takes one *Module*, (with ſometimes a ſmall Moulding of Twenty *Minutes*) the *Capitel* very little exceeding a Third: But its diſtinguiſhing *Characteriſtic* is the *Voluta*; concerning which ſundry Architects have recommended their peculiar Methods, for the Tracing and Turning that Ornament; eſpecially *Vignola* and *Goldman*: The Famous *Mich. Angelo* had one after his own Mode, and ſo others; but that which has been chiefly follow'd, is what *Philip de L'Orme* contends to be of his own Invention.

This *Column* is *Fluted* with Four and Twenty Plaits; the Spaces or *Interſtices* not ſharp and edg'd like the *Doric*, (which is allowed but Twenty) tho' of the ſame depth, and hollow to about a Third Part down-

downward, where they are convexly *ſtav*'d, and thence nam'd *Radiant*, by ſome *Rudent*, tho' of old we find them *Fluted* the whole length ; Thus as the *Capitel* reſembled the modeſt *Treſſes* of a Matron ; ſo did the *Fluting*, the Folds and Plaits of their Garments.

The *Pedeſtal* is of two *Diameters* and as many Thirds : Several other Obſervations pretend to this *Order*, to render it Elegant, which are left to the curious, but theſe are the more Eſſential.

The *Corinthian* had her Birth from that Luxurious City ; trick'd up and adorn'd like the Wanton Sex, and is the Pride and Top of all the other *Orders* : For the reſt it agrees with the Proportion of the *Ionic*, excepting only in the *Capitel* : In a Word, it takes with its *Baſe Nine Diameters* and three Quarters, and ſometimes *Ten* : If *Fluted*, with as many as the *Ionic*, half as deep as large ; the *Liſtel* or Space between the *Groves*, a Third of the depth ; yet not ſo preciſely, but that according to the Compaſs and Station of the *Column*, the Flutes may be Augmented to Thirty and above. *Corinthian*

Our Modern *Architects* for the moſt part, allow but one *Fifth* of the Height of this *Column* to the *Entablature*, comprehending *Baſe* and *Capitel* ; I ſay for the moſt part ; but in the nobleſt, and moſt intire Examples of Antiquity, which is that of the Roman *Pantheon*. The *Entablature* is indeed ſomewhat deeper ; but with this Circumſpection to be Imitated, that the Fabric to which it is applied, be Great and Magnificent, as that Famous Temple is, and which will depend on the Judgment of the *Architect*.

The *Capitel* is of one *Diameter* or two *Modules* in height ; the *Abacus a Sixth* or Seventh Part of the *Diameter* taken at the bigger End of the *Column*, which is univerſally to be underſtood in the Meaſure of all the *Orders* : The reſt ſhall be divided into *Three* equal Parts ; *One* for the Firſt Border or *Toure* of Leaves ; the other for a *Second* ; the Third Part divided in *Two*, and of that which is next the *Abacus* the *Volutas* are form'd, of the other the *Cauliculi* : The *Bell* or *Furſt* under the Leaves, reſembling *Callimachus*'s *Basket*, under which they are Carv'd ; fall exactly with the Hollow of the *Flutings* : In the mean time, there is no ſmall inquiry about the *Foliage*, of what ſpecies of *Thiſtle* the Antients form'd this Florid Ornament ; which is generally attributed to the *Branchæ Urſinæ* ; but of a tender, more Indented and Flexible kind, than the wild and prickly, which we ſee us'd in the *Gothic* Buildings ; whilſt the *Compoſita Capitels* ſtuck it with *Laurel* and *Olive* Leaves, emerging out of the Veſſel, with the *Voluta* above the *Echinus*, and as *Palladio* would have it (eſpecially of the *Olive)* the Sprigs plac'd from five to five like the Fingers of ones Hand, as becoming it better than *Four*, and commends ſome *Capitels* he had ſeen whoſe *Cauliculi* were fac'd with *Oaken* Leaves ;

Note,

Note, that the Scrolls ſeeming to be form'd out of the *Cauliculi*; the *Roſes* in the middle of the *Abacus*, was ſometimes by the Antients of the ſame breadth, which ſince they make to bend on the middle *Voluta*.

The *Baſe* of this *Order* is Fifteen *Minutes* of a *Module*: The *Pedeſtal* requires a *Fourth* Part of the Height of the *Columns*, and ſhall be divided into *Eight* Parts: *One* to the *Cymatium*; *Two* for the *Baſe* (which is the *Attic*) the reſt for the *Zoccole* or *Die*: And thus do the *Three Greek Orders* repreſent thoſe *Three* Species of Building: The *Solid*, the *Modeſt-Mean*, and the *Delicate*, between the *ſimple plain*, the *Gay* and *Wanton*, which are the *Latin* Extreams; whilſt the *Gothic* is riſen from the Corruption of them all: For after all, there's none has been more groſly abuſed, than this Flouriſhing and Noble *Order*, by ſuch as with their Impertinence, have ſometimes rendred it neither *Corinthian* nor *Compoſita*, which is the Fifth and Laſt.

Compoſita. The *Compoſita*, being the *Junior* of all the reſt, and Foreigner to the *Greek*, is of a *Roman* Extraction, and therefore by ſome call'd *Italian*; and tho' not without ſufficient Inſolence, taking place of the *Corinthian*, betwen whom and the *Ionic* ſhe's but a Spawn and Mungrell, as well as the *Tuſcan*, and ſo reckoned among Judicious *Architects*, and by our *Maſter* himſelf, not ſo much as own'd an *Order*, as not thinking it poſſible to invent a more Noble and Compleat, than the *Corinthian*: They would fain it ſeems, have one to bear the Countries Name, and that as they Inſulted over and brav'd the reſt of the *World*, ſhould ſit Triumphant over the reſt of the *Orders*, from whom they have pluck'd their Fine and Gawdy Plumage; priding it over the *Corinthian*, from whom and the *Ionic*, ſhe only differs one *Diameter* more in height.

The *Capitels* four Angular *Scrolls*, take up all that ſpace, which in the *Corinthian* is partly fill'd with the *Cauliculi* and Stalks, and now and then an *Eagle*, *Griffon* is found to neſtle among the Foliage, of which it has a Series of two rows, and under the *Ovolo* the *Ionic* Neck-Lace; whilſt others affirm, that the variety of the *Capitel*, changes not the *Species*, which conſiſts (as *Perault* will have it) in the Length of the *Shaft* only; ſo as no body is to wonder at the prodigious Licentiouſneſs, which ſome we find have run into, to gratify their Ambition. The *French* (of all the Nations under *Heaven*, being the fondeſt of their own Inventions, how Extravagant ſoever, and to Impoſe them on all the World beſide) call it, forſooth, the *Gallic Order*, and with a Confidence peculiar to themſelves, to alter and change what for almoſt Two Thouſand Years, none has been ſo bold to Attempt with that Exorbitance: For they have Garniſh'd this *Capitel* with *Cocks-Feathers* and *Cocks-Combs* too among the *Flowrdeluces*, ridiculouſly enough; hanging the

Leaves

Leaves and Stalks about with the *Chains* and *Ribbons* of the *Orders* of the St. *Esprit* and St. *Michael*, with its dangling *Cockle-Shells*; in imitation doubtless of *Xerxes*'s tying the *Scarfs* and *Garters* of his *Concubine* and *Misses*, among the Boughs of the Famous *Platan*; whilst one would think we might be content, with what the *Romans* have already set for a Pattern on those antient *Columns* of this *Order*; as I am sure the Judicious Author of the *Parallel* would have been, who contrary to the *Genius* of his Country-Men, had the greatest Aversion to the least Innovation in this Profession; what (as we said) the *Romans* have left us being abundantly more Graceful, and rather in Excess: Wherefore by another nice distinction, this learn'd *Commentator* calls *that* the *Composita*, which keeps to its fix'd *Rules* and stated *Proportions*; and that which others every Day Invent, the *De Composit*, or as his term is, *Compo-Composit*, and so sets it up for a *Sixth Order*. But to proceed.

The *Entablature* has by some been allow'd a Fourth Part of the *Column*, but by *Palladio* only five, as to the *Corinthian*.

The *Base* is as the *Attic*, or a Compound of it and the *Ionic*. The *Pedestal* has a Third of the Height of the Shaft: Not but that any of these Proportions so establish'd (as sometimes, and upon just Occasion) may be varied according to the Quality and Grandure of the Building, as to the Inlarging or Diminishing of a Member, if the Judicious *Architect* see Cause, and to be more Graceful, which is a good Rule in all such Cases in the other *Orders*, and for which *Vitruvius* gives excellent Precepts, as he likewise does to their number and placing in single or double Ranks, with their different Application, as whether close to the Wall, or to the *Angle* and Extremes, where if *Insulat* and without touching, more thickness is allowable; since being surrounded by the *Air* only, it is made appear so much the Slenderer, as that some which have been found but of seven *Diameters* only, have become their Stations better than if they had held their intire Dimensions. There now remains the

Caryatides, of which, and of the *Persian*, we have an ample Account in the *Parallel* out of *Vitruvius*, introduc'd as a Mark of Triumph over the *Caryans* of *Peloponesus*; whom the *Greeks* having vanquish'd with their Confederates, they caus'd the Images and Resemblances of both Sexes and Nations (as Slaves, *Atlantes*, and *Talamones*) to be plac'd and stand under Massy Weight and Superstructure instead of *Columns*: The *Women* to signifie those of *Carya*, whom they only spared; and the *Men*, as Captive *Persians*, which gave Denomination to the *Order*, if at least they may be call'd so for distinction sake only; since they differ in nothing either of Height, Substance, or *Entablament* from the Feminine *Ionic*, and Masculine *Doric*: But how or where they had originally been *Caryatides.*

employed in any remarkable Building, is not ſo perſpicuous, from any Antient *Veſtigia* at preſent remaining; but as they ſeem moſt properly to be plac'd at Entrances, and before *Arches* and *Porticos* in-inſtead of *Pillaſters*; ſo doubtleſs they gave occaſion to many *Gothic* Abſurdities, and Extravagant Poſtures of *Men*, *Monkeys*, *Satyrs*, &c. for the bearing up of *Cornices*, in place of *Mutuls*, and *Cartouſes*, to that ſhameful Impudence, as we ſee them not ſeldom in our very Churches.

There remain yet of *Columns* divers other Sorts (to mention only the *Duilian*, *Roſtral*, *Mural*, *Obſidional*, *Funebral*, *Aſtronomial*, and other Symbolical Monuments, which may upon ſome particular occaſions have their Places,) but no more that can honeſtly derive a Legitimate Pedegree: For ſome are *Wreath'd*, others *Spiral* and the like: But as we meet them not in any approved Author, or Antient Fabric; ſo are they very ſparingly to be made uſe of, if at all: Indeed the Famous Architect, *Cavalier Bernini*, has caſt a Set of theſe *Torſed Columns* of a vaſt height; twiſted about again with Branches, among which are *Puti*, little *Angels*, Pope *Urbans Bees*, and other imboſſed Sculptures, all of Gilded *Copper*, to ſuſtain the *Baldachino* or ſacred Canopy over the high *Altar* under the Cupola at St *Peter*'s, which are exceedingly Magnificent: But it does not always ſucceed ſo well where it is practis'd: 'Tis yet reported that there was an Antient *Wreath'd Column* found ſomewhere, wound about with a *Serpent*, (as *Painters* repreſent the Tree in *Paradiſe*) taking nothing away from the ſtraightneſs of the Shaft; for ſo the Antients prefer'd the Solid and Subſtantial in all their Works, admitting nothing to bear any weight that ſhould ſeem in the leaſt to plie, yield or ſhrink under it, as thoſe ſorts of *Columns* appear to do: But as the great *Maſters*, and ſuch as *Mich Angelo*, &c. Invented certain new *Corbells*, *Scrolls* and *Modilions*, which were brought into uſe; ſo their Followers, animated by their Example (but with much leſs Judgment) have preſum'd to Introduce ſundry Baubles and trifling decorations (as they Fancy) in their Works; Ambitious of being thought *Inventors*, to the great Reproach of this noble Study; ſo dangerous a thing it is to Innovate either in Art or Government, when once the *Laws* and *Rules* are prudently ſettl'd and Eſtabliſh'd, without great conſideration and neceſſity: And therefore, tho' ſuch Devices and Inventions, may ſeem pretty in *Cabinet-Work*, *Tables*, *Frames* and other *Joyners*-Work, for variety, to place China-Diſhes upon; one would by no means, encourage, or admit them in Great and Noble Buildings. Laſtly,

As to the *Placing* of the *Orders* and Stations of *Columns* in Work; the ſimpleſt, ſtrongeſt, and moſt ſubſtantial, are ever to be aſſign'd to ſupport the Weaker. The *Romans* indeed ſometimes ſet the *Compoſita*

posita above the *Corinthian*; but 'twas not approv'd of by the Judicious, nor in truth should they appear *together* in the same Building: Generally then, the *Rule* is this, to place the Highest and Richest *Order* over the more Solid and Plain; especially, where they are to decore the *Face* and *Fronts* of Buildings, consisting of two or three Stages: But whether at all, or not, their *Proportions* should be chang'd or abated, is nicely disputed by our *Architects*, of which see *Monsieur Perault* on *Vitruvius*, *Lib.* VII. *Cap.* 7. speaking of *Scenes*; Concluding, that it ought to be done very sparingly, and with great Consideration: In the mean time, *Columns* plac'd over *Arches*, produce this Inconvenience, that the *Arches* of any of the five *Orders*, if well proportion'd (suppose for Instance, *Doric*) it will become defective, in the *Ionic* and *Corinthian*, by Reason of the *Intercolumnation*; the Distance hindring their Collocation so exactly over one another, as become them. There is after all, a *Lesser* sort of *Column*, than any we have spoken of, which now and then we find plac'd over a much *Greater*, next the *Roof*, or rather a kind of *Pilaster* after the *Attic* Mode. To Conclude,

The Position of double *Columns*, upon the same *Pedestal*, I find quite condemned by *M. Blondel* as intollerable, accounting it *Licentious* ever among the *Antients*; which (as great *Artists* do not always agree) *Monsieur Perault* as learnedly defends, and vindicates; and that one is not so precisely oblig'd to Rules and Examples, but that in some Cases, they may safely be departed from for the better; since it were to put a stop to the Improvements of all *Arts* and *Inventions* whatsoever, none of which were consummately perfect at the first; besides, that there is nothing *Positive* in the Case: However, as to this particular, the *Antients* did frequently use to joyn *Columns*, two and two very near to one another upon the same *Pedestal*, leaving a distance of two *Intercolumnations* in *One*; which tho' *Perault* holds to be a little *Gothic* and much affected by his Country-Men the *French* (as they do all Novelties) so they would have it pass for a peculiar manner of *Disposition*: The *Pseudostyle* is yet we find made use of by great *Architects*, and therefore to be referr'd to able Judges.

Notwithstanding, inasmuch as there do yet happen some *Superstructures* which both in *Works* and *Books* of this Magnificent *Science* have likewise *Names* of doubtful signification, and to satisfie all that may be farther desir'd for the rendring of this Undertaking more useful and instructive, I will in brief proceed to what is used to appear further in *Buildings*, where they did not flatten the *Roofs* and Covers of *Edifices*, and which tho' certainly of all other the most Graceful, is of necessity alterable according to the Climate.

Those *Roofs* which exalted themselves above the *Cornices* had usually in *Face* a *Triangular plain* or *Gabel* within the Mouldings (that

(that when our Workmen make not ſo Acute and pointed they call a *Pedament*) which the *Antients* nam'd

Tympanum *Tympanum*, but this is to be taken now and then for the whole *Frontiſpiece* from the *Cornice* to the upmoſt part of the *Fastigium* or ſuperior Angle of it, and is commonly circumſcrib'd with the ſame *Cornice* that the ſubjacent *Order* is of. It is properly plac'd at the *Front* and *Entrance*, and over the *Porches*, *Windows*, *Niches*, &c. to protect them from the Injuries of the Weather; and therefore very impertinently *Broken*, or Flatted by ſome, which expoſes all that is under, to many Inconveniences, nor ſhould it be at all allow'd ſave where an abſolute neceſſity of ſetting in ſight (not otherwiſe to be had) pleads for it: Now tho' they are commonly made *Triangular*, we frequently find them *Semi-Circular* (or of ſome other Section) whereof the *Baſe* is the *Diameter*: Some again have a double *Tympanum*, as in that *Tuſcan* Example deſcrib'd by *Perault*, *Vit.* l. 3. where the ſtanding out of the *Porch* from the reſt of the main Wall of a *Temple* of that *Order*, requires it; I ſay before a *Temple*; ſince they were never made in the Fronts of any other Buildings; the Antients Dwelling-Houſes being generally flat at the Top, *Julius Cæſar* being the firſt whom they Indulg'd to raiſe his Palace in this *Faſtigious* manner: As *Salmaſius* tells us in *Solin*: I need not add, that the *Die* of a *Pedeſtal*, and other flat and naked Parts in out-ſide Work and Pannels of *Wainſcot* is ſometimes call'd *Tympana*; ſince it may be to better purpoſe, to give ſome Directions about the Proportion and Acceſſaries belonging to it; it being much diſputed; *Vitruvius* allowing neither of *Dentelli*, or *Modilion*, but a ſimple *Cornice* only; tho' we find them both very ornamently applied; ſome affecting to place them according to the *Slope*, others perpendicular to the *Horizon*, and not to the *Cornice* which they ſeem to ſupport, as well as Beautifie; or rather to the Poſture of the *Rafters*-ends which they repreſent. We ſometimes find *Dentelli* under the *Modilion*, but by none approv'd; a ſingle row of *Teeth*, or a plain *Liſt* only more becoming on thoſe occaſions, as well as for the Height of the *Drum* or *Tympan* (by which ſome diſtinguiſh the *Round* from the *Pointed* which they name *Frontons*) which ſome Noble *Statue*, or *Baſs-Relieve* may require a more than ordinary Elevation of; In the mean time, *D'Aviler*'s Figure following may give ſome Direction to Workmen:

Di-

Divide the Line *a b* (which ſuppoſe the *Hypotenuſe* of the *Baſe*) into two equal Parts at the Point *c*, let down the *Perpendicular f e d* indefinite, in which *e d* being equal to *a b* from *d* as the Centre, deſcribe the Arch *a e b* and where it interſects the Perpendicular as at *e* there ſhall be the *Faſtigium* or Point of the *Tympane*.

There are other Methods in *Serlio*, and the Maſters; ſome *Iſocele*, whoſe Angles oppoſite to the *Baſe* are more obtuſe; others yet lower, and higher even to a full *Diameter*, as were thoſe *Pliny* call'd *Plaſtæ* for *Statues* and taller Figures, as alſo at the *Cima* or Point, and at each *Angle*, there ſtood of thoſe ſmaller Pedeſtals we ſpake of for the placing of *Statues*, *Buſts*, *Urns*, *Lamps* of Fire, *Pine Cones*, *Bowles*, or the like *Ornaments*, and theſe *Stylobata* were call'd.

Acroteria, from ἄκρον *ſumma pars*, we may properly name them *Pinacles*, for ſo *Pinnæ* and *Batlements* were made ſometimes more ſharp, Towring or Spiry, as pleaſed the Workman; but where they ſtood in *Ranges* (as not unfrequently) with *Rail* and *Balauſters* upon flat Buildings, they ſtill retain'd their name, with this only difference, that ſuch as were plac'd between the *Angular* Points were (like ranges of *Pillars*) ſtyl'd the *Median* or middle *Acroteria*: For the moſt part a ſmall *Die* without any *Baſe*, in proportion ſomewhat leſs than the Breadth of the Neck of the *Column* (if there ſtand any directly under it) and equal in Height to the middle of the middle *Tympane*; and that at the very *Faſtigium* may be allow'd an eighth Part more. *Acroteria.*

They did likewiſe ſometimes cover (eſpecially *Temples*, and ſuch Magnificent and Sacred Buildings) with a *Cupola*, which is that *Dome* or *Hemiſphærical* Concave made in reſemblance of the *Heavens*, and admitting the Light at the top *Center* or *Navil* only, without any *Lantern*, as is to be ſeen in that incomparable piece of the *Pantheon* yet extant: This is much in Vogue yet in *Italy*, and of late in *France*, eſpecially at *Rome* and *Florence*, but it is commonly with the *Lantern* and other *Apertures* to let in *Day* without expoſure to the Weather, as appears by that on the ſummit of Saint *Peter*'s; but it takes away, in my poor Judgment, ſomething from the ſolemneſs, and natural reſemblance of the *other* which yet are happly better to be endur'd in the more *Eaſtern Countries* where the Weather is conſtant; as we ſee it Practis'd in what the Pious *Helena* erected in the *Holy Land*, and her Son *Conſtantine the Great*, or rather, that at preſent, by the Emperor *Juſtinian*, (one *Anthemius* of *Trales*, and *Iſidor* the *Miletan* being the Architects) upon that Magnificent Structure of *Santa Sophia* yet remaining at *Conſtantinople*, and to this Day imitated by the *Turks* for the Covering of their *Moſques*; and that it was an *Oriental* Covering and Invention, the θόλος of the *Greeks* was doubtleſs de- *Tholus.*

riv'd from the *Hebrew* תלה *Thala* signifying to *Suspend* or hang as it were in the *Air*; but the *Italian* Name seems to come from *Cuppa* a *Cvue* or great Washing-Bowl, which it much resembles. As to the Name *Dome*, whether from the *Greek* δῶμα, a Covering (as *Du Lange*) or as *Vossius*, *Domus*, I am not concern'd (but when they call it *Dome*, it ever signifies the *Cathedral*) 'tis commonly erected over the middle of the Building where the *Isles* cross, and ought to be in Height, *half* the *Diameter* of the *Church*, meaning the *Cuppa*, only (by some nam'd the *Pyramis*) and not the *Lantern* or *Flos*, by *Architects* so call'd, from some *Flower*, or like Ornament which was plac'd upon it: In the mean time, we find some of these Coverings in other Shapes, and *Multangular*, not exceeding *Eight*; but they are nothing so graceful as the *Dome-Spheroid*: Sometimes also they are made to let in greater Light by a sort of *Lucarr* Windows; by which are meant those *Subtegularian* Windows that appear in our Roofs above the Cornices; of which some are square with Pedaments; others Round or Oval and *Oxe-Eyed* as they term them, most accommodate to the *Cupola*, and had need have twice and an half the Height of Breadth, by reason of the distance, with circular *Frontoons*, whilst *Windows* in upright Walls, ought not to be above a Fifth part less wide, than those beneath them, which are ever to be even with the *Cornices* of the Ceiling: Antiently, Windows were open to the very *Floor*, or only clos'd with a *Balluster* and *Rail*, much safer, and as Commodious altogether to look into Streets, or enjoy the Prospect as our late *Meniana* and *Balconies* are, which jettie out, and rest only upon Scrolls and *Mutules* for Reasons already mention'd: *Arched Vaults* in Cellars should have Arched *Aperture* and Windows.

Other *Accessories* and *Ornaments* are also used in *Buildings* which I will only touch.

Niches. *Concha.* *Niches*, *quasi Nidi*, Neasts, of old *Concha*, are a kind of *Pluteus* or smaller *Tribunals* (as they are yet called in *Italy*) wherein *Statues* are placed to protect them from the down right Injuries of the *Weather*, as well as for Ornament to plain and simple *Walls*: As to their regular Sections (tho' as we have already Noted, there be nothing determin'd) one may allow them double; half, or quarter more of their Breadth, and half for the Cavity, whether Circular or Square: The rest suitable to the *Character* of the main Building, and proportion of the *Statue* design'd, and therefore in placing an *Hercules*, *Commodus* or larger Figure, a *Rustic*, or *Doric* Work and Ornament, would become them better than the *Corinthian* or *Compost* delicacy; fitter for the less robust, and more effeminate, whether naked as the *Greeks* Statues, or clad as were the *Roman*: And so in respect to situation; if low, or even to the *Area*, or much higher; the statelier and taller *Figures* should be plac'd in the lower *Niches*:

Niches: The ſhorter, over thoſe, and their Niches thrice the height of the breadth, tho' the *Figure* exceed not that of the *Impoſts*. Square *Niches* have a *third* of their largeneſs in depth, and twice the height: When there happens a very large *Peere* or Square (as ſometimes between the *Windows*) they ſhould obſerve the proportion of the *Aperture* both for height and breadth, with ſuitable Decoration: But between *Columns* or *Pillaſters* ſtanding one upon the other, *Niches* are not ſo proper; becauſe they fill the Spaces too much; and where more than one is plac'd, the Interval ſhould be equal to their Breadth; and never to admit them at the *Coines* of a Building, as frequently we ſee them abroad to Inſhrine ſome *Saint*, that the Image may be ſeen in ſeveral Streets: In a Word, the too thick, and frequent *Niches* becomes no Building, and are unſufferable where a Cornice is broken to let them in to *Groups*, and Aſſemblies of more Figures, as the Action may require; the *Niche* is to be ſuited, and ſhould begin at the Floor or Pavement with *Plinth* or *Pedeſtal*, higher than for a ſtanding Figure, which is ever to be allow'd the firſt: And if plac'd in a ſpacious Court or Garden, the *Pedeſtal* ſhould be higher; ſo as the Statue may be viewed round about: As to farther Decoration, it were abſurd to Carve a *Mask*, *Satyrs* or *Lyons* Head, as we ſometimes ſee them, upon the *Key-ſtone*; leaſt ſtanders by, take the *Statue* for ſome two-headed Monſter; nothing more becoming it within, than the uſual *Eſculop*, whether wrought in the Stone or Plaſter: Indeed *Niches* ſhew beſt without much *Ornament*, *Columns* or *Pillaſters*; unleſs plac'd at the end of ſome long *Gallery*, *Portic*, or *Veſtibule* of *Church*, *Exchange* or *Courts* of *Juſtice*, &c. Oval *Niches* do handſomely for *Buſts*, and *Vaſas*, if not ſet in too deep; and therefore may be allow'd to ſtand on a Scroll or *Mutule*: Laſtly, when *Niches* are made very much larger and higher, beginning from the *Pavement*, they were call'd.

Tribunals, as of old it ſeems applied to all high and eminent Places, where the *Tribunes* of the People us'd to ſit as Judges: We have a Noble Reſemblance of *this* in that magnificent *Throne* deſcrib'd 1 *Reg.* 10. 19. built by *Solomon*, which ſeems to me to have been ſuch an ample *Nich* in which a *Principal* Perſon might ſit, as it were half *Canopied* over within the thickneſs of the Wall. *Tribunal.*

In Walls likewiſe did they inſert many noble and moſt exquiſite *Sculptures* and *Hiſtorical Fables*, half wrought up, *Emboſs'd* and ſwelling, and ſometimes more than half, which *eminencies* they now call in *Italy* by the name of *Baſſe*, and *Mezzo relievo*: Theſe were ſometimes wrought in *Marble*, as in that famous *Abacus* and *Stylobata*, yet extant, of *Trajan*'s *Pillar*. Their ordinary placing was in the *Fronts* of *Edifices*, as is yet to be ſeen in divers Palaces at *Rome*, and eſpecially in their *Villas* and Retirements of Pleaſure, which *Relievo.*

which are frequently incruſted with them, but vilely imitated in our expoſed *Fretworks*, about *London*, to the Reproach of *Sculpture*; eſpecially where it pretends to *Figures* on the out ſides of our *Citizens* Houſes. I well remember there was in one of the Courts of *Nonſuch*, ſeveral large Squares of *Hiſtorical Relieve* moulded off, or wrought in *Stucco* by no ill Artiſt (I think *Italian*;) which upon the Demolition of that Royal Fabrick, I hear, have been tranſlated, and ornamently plac'd by the late moſt Honourable *Earl* of *Barkley*, at his delicious *Villa Durden*'s in *Surrey*, not far from *Nonſuch*; which is thus deſcrib'd by *Cambden* (as lately publiſh'd by the very learn'd Mr. *Gibſon*) where ſpeaking of that Kingly Palace, he calls it *Magnificent to ſo high a pitch of Oſtentation, as one would think the whole Art of Architects were crowded into this ſimple Work:* And then as to *the Relievo* (which appears to have ſtood expos'd there ever ſince the Reign of *Henry* VIII. who built the Houſe) *ſo many Images to the Life, upon the Walls thereof, ſo many Wonders of an Accompliſh'd Workmanſhip, as even Vie with the Remains of* Roman *Antiquity.* Indeed, this ſort of *Decoration* has of late been ſupplied by *Painting* in *Freſco*, and that by very able Hands, eſpecially Signior *Verrio*, &c. as 'tis frequently in *Italy* by the moſt Famous *Maſters*; which I wiſh the Inclemency of our ſeverer *Climate*, were as favourable to, as the Work deſerves.

Ornaments, however Gay and Fine they appear to the Eye, and are in many Caſes very laudable and neceſſary; there is yet no ſmall Judgment requir'd, how, and when to place them appoſitely; ſo as they do not rather detract from the Beauty of the Work, than at all contribute to it: Now by *Ornament* we underſtand whatſoever of *Sculpture* and *Carving* is not of conſtant uſe, or abſolutely neceſſary in all Members; ſuch as *Frutages*, *Faſtoons*, *Chaplets*, *Wreaths* and other *Coronary* Works: *Frets*, *Guilloches*, *Modilions*, *Mutuls*, *Chartoches*, *Dentelli*, *Metops*, *Triglyphs*, *Ovola*, *Pine-Cones*: *Niches*, *Statues*, *Buſts*, *Relievos*, *Urns*, &c, In a Word, all ſorts of *Mouldings*; *Vitruvius* under the name of *Ornament*, reck'ning the whole *Entablature*; in which the *Frize* ſeems to be the moſt proper Field for Decoration, as the moſt conſpicuous place, and where, tho' the *Sculptor* ſhew'd his Addreſs and Invention; The Antients (who ſpared nothing which might accompliſh the Publick Buildings) were not at all ſo laviſh, in over frequent and unneceſſary Gayities: Their *Temples*, *Amphitheatres*, *Circus*'s, Courts of *Juſtice*, *Fora*, *Ports* and Entries of *Cities*, *Priſons*, *Bridges*, *Baſilica*, Royal *Palaces* and other Buildings of State, where grave and Solid Structures void of thoſe little *Membrets*, trifling *Mouldings* and ſuperfluous Carvings, which takes away from that Majeſtic and *Grand Manier* that moſt becomes them: Reſerving thoſe richer *Acceſſories* and coſtly Finiſhings, for *Theatres*, *Triumphal Arches*, *Hiſtorical Columns*, and o-

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ther Oſtentous Pomps: Nor even in theſe did they uſe them promiſcuouſly; but with great Judgment Symbolical to the Subject and Occaſion: And therefore thoſe Antient Ornaments would not ſuit ſo properly with the Ages ſince, and may I conceive lawfully be chang'd, without Preſumption, or Injury to any Eſſential Member: As if (for Inſtance) inſtead of *Sphinges* and *Griffons* plac'd before the Pagan *Temples*, (Guardians of *Treaſure* which was kept in thoſe Sacred Buildings) *Angels* ſhould be ſet before our *Churches*; And in the *Doric Frizes*, inſtead of *Ox-Sculls*, the Prieſts *Seceſpita*, *Guttæ*, *Acerra*, *Simpula* and other Sacrificing Utenſils; We chang'd them in our *Churches* (where that *Order* beſt beſeems them) into *Cherubs*, Flaming *Hearts*, *Books* laid open, the *Patin*, *Chalice*, *Mitre*, *Croſier*, &c. The Frontons of *Magazines* and publick *Munitions*: had the Sculps of Antique *Casks*, *Targets*, *Battle-Axes*, *Thunderbolts*, the Battering *Ram*, *Catapults*, &c. Which we may anſwer with our Modern Artillery of *Canon*, *Bombs*, *Mortars*, *Drums*, *Trumpets* and other Warlike Engines; and to their *Roſtra*, *Rudders*, *Anchors*, *Tridents*, *Scalops*, &c. the Wonder-Working *Nautic-Box*, with whatever elſe of uſeful and Conſpicuous has improv'd our *Navigation*. The *Tympan* before *Courts* of *Juſtice* may become her *Statue*, ſitting on a *Cube*, with *Faſces*, *Axes* and other Emblems of *Magiſtracy*.

Thermæ were adorn'd with *Jarrs*, *Ampullæ*, *Strigils* in the *Frizes*: The *Mauſolea*, *Urns*, *Lamps* and ſmoaking *Tapers*: *Hippodroms*, *Circus*'s had the Statues of Horſes on the Fronts *Metæ*, *Obeliſes*, &c. The Publick *Fountains* were ſeldom without the *River Gods*, *Nymphs*, *Naides*, *Tritons*, *Hippopotoms*, *Crocudiles*, &c. *Theatres* were ſet out with *Maſcara*, *Satyrs* Heads, *Mercuries Caduceus*: The Statues of *Apollo*, *Pegaſus*; the *Muſes*, little *Cupids* and *Geny*, *Laureat Buſts*, &c. *Arches Triumphal* with *Relievo* of the Conquerors Expedition, *Trophies*, *Spoils* and *Harnaſſe*, *Palms* and *Crowns*. And where *Tables* for Inſcriptions were inſerted to continue, or but only for a ſhorter time, as to Celebrate ſome ſolemn *Entry*, a Prince's *Coronation*, *Royal Nuptials*, adorn'd with *Deviſes*, and *Compartments* for Pomp and Show: The Contrivance was under the Direction of the *Architectus Scenicus*, and requir'd a particular Talent and Addreſs, *Poetic* and Inventive: In Sum, all Ornaments and Decorations in general, ſhould be agreeable to the Subject; with due and juſt Regard to the *Order*, which the *Antients* Religiouſly obſerv'd; tho' where (as we ſaid) it was not abſolutely Eſſential; leaving out or putting in as they thought convenient; for excepting the *Dreſs*, and *Tire* of the *Ionica*, *Corinthian* and *Compoſita Capitels*, they were not obliged to charge the other Members with coſtly Ornaments; ſo as they frequently left out the *Metors* and *Triglyph* in the *Frizes* of the *Firſt* (as we have already Noted) the *Dentelli*, *Ovolo* and quarter *Round*, in the Grand *Cornice* of the *Latter*, plain and without Carving;

ving; neither did they often fill the *Pedeſtals* with *Relievo*; nor the *Staves* in the *Flutings*; and rarely ever allow the *Corona* any inrichment at all, or ſo much as rounded; and were free to leave the *Doric Plancere* naked, or with ſimple *Guttæ* only. They were careful not to Multiply larger *Mouldings*, which ſometimes they alter'd, and now and then would ſeparate them with a ſmaller *Liſt* or ſimple *Fillet*; ſometimes uſing the Carved *Aſtragal*, and at another, the Plain; always leaving the *Liſt* of the Superior *Cornice* Flat, to ſhew us, that the ſafeſt Rule to go by, is to follow the *Character* of each Reſpective *Order*: And indeed how odly would the *Tuſcan* or *Doric* become the *Corinthian Coifure*, or the ſpruce and florid *Corinthian* a *Tuſcan* Entablature: The ſame is to be conſidered in the *Key-ſtone* of *Arches*; Plain in the *Tuſcan* and *Dorica* with a moderate Projecture: The *Ionica* Scroll, ſerving us a *Prothyrides*, on ſuch occaſions may be richly Flower'd and Carv'd in a *Corinthian* or *Compoſit* Entrance, and where they ſuſquert Tables and *Menſulæ* for ſome Inſcription: *Roſes*, *Lyons*-Heads, *Eſcalops* and other decorations are allowable under the *Corona* with this Rule, that whether here, or under any *Roof* or *Ceiling* interlacing *Fretts*, be ever made as *Right Angles*: Laſtly, as to *Poclia*, *Rails* and *Baluſters*, ſo to humor the *Order*; that the *Tuſcan* be plain, but not too gowty, or too cloſe to one another, or far aſunder, that is, not exceeding *twice* the *Diameter* of the Necks; nor are they oblig'd to a conſtant Shape; for ſome ſwell *below*, others *above*; and ſome are made like *Termes*, all of them having their peculiar Grace and Beauty: What is ſaid of *Tuſcan* is to be underſtood of the reſt; ſo as the *Corinthian* and *Compoſita* may be Carv'd and Inrich'd without any Scruple, for any thing that appears to the contrary among the Antients, or our ableſt Maſters: To Conclude, not only the Roofs of Houſes, and their *Fronts* had their Adornments, but the *Floors* alſo were inlaid with *Pavements* of the moſt precious Materials, as of ſeveral Coloured *Stones* and *Woods*, and this they call'd

Emblema, continued to this Day by the *Italians* in their *Pietræ Comeſſa*; of which the moſt magnificent and ſtupendious *Chappel* of Saint *Laurence* at *Florence*, *Paul the Firſt*'s at *Sancta Maria Maggiore* in *Rome*, are particular and amazing inſtances, where not only the *Pavement*, but likewiſe all the *Walls* are moſt richly incruſted with all ſorts of precious *Marbles*, *Serpentine*, *Prophirie*, *Ophitis*, *Achat*, *Rants*, *Coral*, *Cornelian*, *Lazuli*, &c. of which one may number near thirty ſorts, cut and laid into a *Fonds* or ground of *Black-Marble* (as our *Cabinet-Makers* do their variegated Woods) in the ſhape of *Birds*, *Flowers*, *Landskips*, *Grotesks* and other *Compartiments* moſt admirably Poliſhed, a glorious and everlaſting Magnificence: But where it is made of leſſer *Stones*, or rather morſels of them, aſſiſted with ſmall *Squares* of thick *Glaſs*, of which

Emblema.

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ſome are *Gilded*, or Cemented in the Stuc or Plaſter, it is call'd *Moſaic-Work*, *opus Muſivum*, and it does naturally repreſent the moſt curious and accurate ſort of *Painting*, even to the *Life*, nor leſs durable than the former, as is moſt conſpicuous in that Front of Saint *Mark*'s Church at *Venice*, the *Nave* or Ship of *Giotto* under the *Cupola* of Saint *Peter*'s at *Rome*, and the *Altar-piece* of Saint *Michael* near it: Theſe are the *Teſſellata* and *Vermiculata* or *Pavimenta aſarota* of the *Antients*, which no Age or expoſure Impairs, but of which I do not remember to have ſeen any Publick Work in our *Country*. In the mean time not to be forgotten are the *Floorings* of *Wood* which Her Majeſty the Queen *Mother* has firſt brought into uſe in *England* at Her *Palace* of *Sommerſet-Houſe*, the like whereof I directed to be made in a Bed-Chamber at *Berkley-Houſe*: The *French* call it *Parquetage*, a kind of *Segmentatam opus*, and which has ſome reſemblance to theſe Magnificencies; Becauſe it is exceeding Beautiful and very Laſting: And this puts me in mind of that moſt uſeful *Appendix* joyn'd to Mr. *Richards* late *Tranſlation* of the firſt Book of *Palladio*, and thoſe other Pieces of *la Muet* the *French Architect*, wherein, beſides what he has Publiſh'd concerning theſe kinds of *Timber Floors*, &c. you have at the Concluſion of that *Treatiſe* a moſt accurate Account of their *Contignations* and Timberings of all ſorts of *Stories*, *Roofings*, and other *Erections*, with their uſe, *Scantlings* and proper Names, which, for being ſo perſpicuouſly deſcrib'd, deſerves our Commendation and Encouragement. *Moſaic.*

May this then ſuffice, not only for the Interpretation of the *Terms* affected to this Noble Art; but to Juſtifie the *Title*, and in ſome Meaſure alſo for the Inſtruction and Aid of divers Builders, on ſome occaſions, wherein they not ſeldom fail; eſpecially in the *Country* (where, for the ſaving a little Charge, they ſeldom conſult an experienc'd *Artiſt*, beſides the Neighbour *Brick-layer* and *Carpenter*) till ſome more dextrous and able Hand, and at greater Leiſure, Oblige the Publick, and our *Country Men*, with ſuch a Body and *Courſe* of *Architecture*, as with others, *Monſieur Blondel*, *D'Avilar*, (and *inſtar Omnium* the Learned *Perault*, by his *Verſion*, and uſeful *Comments* on *Vitruvius*) have done for theirs.

Eum Architectum oportet uſu eſſe peritum & ſolertem, qui demere aut adjicere preſcriptis velit.

J. E.

F I N I S.

To the READER.

THere is no Man pretending to this Art, or indeed to any other whatsoever, who does not greedily embrace all that bears the Name of Leon Baptista Alberti, who was a Florentine Gentleman of Illustrious Birth, great Learning, and extraordinary Abilities in all the Politer Sciences, as he stands Celebrated by Paulus Jovius, and for which he became so dear to that great Mecenas Lorenzo di Medici, who chose him, with Marsilius Ficinus, Christopherus Landinus, and other the most refin'd Wits of that Age, to entertain his Academic Retirements and Solitude of Camaldoli: You have an ample Catalogue of his Learned Works, Latin and Italian, publish'd at the end of his Life by Rafael du Fresne that Great French Virtuoso, together with the History of those many incomparable Structures design'd and conducted by this rare Genius, extant at this Day in Florence, Mantoa, Rimini and other Cities of Italy; as being indeed one of the very first that polish'd the now almost utterly lost and extinguish'd Art of Architecture; in which how successfully he joyn'd Practice to Speculation, there are abundance of Examples, some whereof are wrought by his own Hands. He Composed three Books, De Pictura, full of incomparable Researches appertaining to that Noble Art: This of Statues was first Written in Latin, but it having never been my hap to find it (and I think it was never Printed) I made use of this Version out of the Italian, as it was long since Published by that Ingenious Person Cosimo Bartoli, and have subjoyn'd it to this Discourse of Architecture, not only because they cannot well be separated, but for that the Author (being one of our Parallel) the Argument appear'd so apposite and full of profitable Instruction to our Workmen, who for want of these or the like Rules, can neither securely Work after the Life, or their own Inventions, to the immence Disgrace of that Divine Art. This brief Account I thought fit to present thee, Reader, concerning this Piece of Alberti's, it being the very First of the Kind which ever spake our Language.

R J. Evelyn.

COSIMO BARTOLI

To the moſt Excellent *Architect*, and *Sculptor*

BARTOLOMEO AMMANTI.

ALthough I am perfectly aſſur'd (my moſt ingenious Bartolomeo) *that you, who are ſo univerſally accompliſh'd, and in particular, ſo skilful, and well verſed in* Architecture *and* Sculpture, *have no need of thoſe* Rules *and* Precepts, *which the moſt judicious* Leon Baptiſta Alberti *has Publiſh'd concerning* Statues ; *Yet I eaſily perſwaded my ſelf that this Addreſs of them to* You, *would not be a thing unacceptable, as being to a* Perſon *ſo well able to Judge of that rare Fancy, and incomparable Worth of the ſaid* Leon Baptiſta, *who in a time wherein little or nothing of* Sculpture *was known (all good* Arts *and* Sciences *being then in a manner annihilated and wholly extinct throughout* Italy, *by Reaſon of the many inundations of* Barbarians) *imploy'd the utmoſt of his Abilities to open an eaſy and ſecure way for our* Youth : *who though unexperienc'd themſelves, delighted in this moſt noble* Art ; *and to incite them to join diligent Practice, with the Obſervation of ſure and unerring* Rules. *No wonder therefore, if from that time forward ſuch wonderful Progreſs has been made in this* Art, *as has brought it to that Perfection wherein it is ſeen flouriſhing at this Day : So as in this Age of ours, we have no need to envy thoſe ſo much admired* Statues *of the moſt celebrated* Sculptors *of the Antient* Romans, *when we ſhall well conſider what has been perform'd by our Countryman* Donato, *and not many Years ſince the Divine* Michael Angelo Buonaroti ; *as after him, by* Baccio Bandinelli, Benuenuto Cellini, *and laſtly, by* Your Self ; *whereof, that I may produce ſome* Inſtances *(beſides thoſe many* Statues *which are extant of all your Hands) proclaiming your ſingular Merits to the Admiration of all Men, there are to be ſeen in the* Piazza *of their* Highneſſes *Royal* Palace, *the moſt beautiful* Judith ; *the moſt ſtupendious* Coloſſo *of* David, *the robuſt and fierce* Hercules ; *the moſt maſterly handl'd* Perſeus, *together with all his rare and curious Adornments ; and which is indeed the greateſt of all the reſt,* Your *own* Neptune, *with the other three* Statues *accompanying it, cut out of* one *intire piece of* Marble, *and fram'd with ſo magiſterial a height of Art, as not only produces wonder in all that attentively behold it ; but does as it were wholly aſtoniſh them to contemplate the* Ingenuity, *the* Science, *the* Induſtry, *the* Diligence, *the* Affection, *and in fine, the never to be ſufficiently celebrated* Skill *of the* Artiſts. *Vouchſafe therefore that theſe (however impoliſh'd)* Inſtructions, *ſo much conducing to the information of unexperienc'd Youth, be recommended to the publick view under Your* Name *and Protection ; and as it has ever been Your Cuſtom heretofore, Love your* Friends, *amongſt whom I Conjure You to to eſteem me none of the leaſt.*

Farewell.

LEON BAPTISTA ALBERTI

OF

STATUES.

I Have often thought with my ſelf that the ſeveral Arts, whereby Men at firſt Induſtriouſly ſet themſelves to expreſs, and repreſent by Work of Hand, the Shapes and Similitudes of Bodies, ſpringing from natural Procreation, took their Beginning from the accidental obſervation of certain Lineaments either in *Wood*, or *Earth*, or ſome other ſorts of Materials, by Nature ſo diſpos'd, that by altering or inverting ſome thing or other in their form, they appear'd capable of being made to reſemble the Figures and Shapes of living Creatures; and thereupon, having ſeriouſly conſider'd and examin'd what Courſe was beſt to take, they began with utmoſt Diligence and Induſtry to try and make experiment, what was neceſſary to be added, or taken away, or in any other kind perform'd, for the bringing of their Work to ſuch perfection as might cauſe it exactly to reſemble the intended form, appearing, as it were, the very ſame thing; ever marking as they wrought, to ſee if they had fail'd in any thing, and ſtill mending as they found occaſion, ſometimes the *Lines*, ſometimes the *Superfices*, *Poliſhing* and *Repoliſhing*, till at length (not without much Pleaſure and Satisfaction) they had accompliſh'd their deſire: So that it is not a thing ſo much to be admir'd, that by frequent Practice in Works of this Nature, the *Fancies* and *Ingenuities* of Men have been from time to time improv'd, and advanc'd to that height, that at laſt (without taking Notice of any rude *Draughts* in the Material they wrought upon, to help them in their intended *Deſigns*,) they became able by their Skill to *Deſign* and expreſs upon it whatſoever form they pleaſed, though in a different manner, ſome one way and ſome another; for as much as all were not taught, or apply'd themſelves to proceed by the ſame Rule or Method. The Courſe that many take to bring their intended *Figures* to Perfection, is both by adding to, and taking from the Material; and this is the way of thoſe that work in *Wax*, *Plaiſter* or *Clay*, who are therefore term'd *Maeſtri de ſtucco*, others proceed by taking away, and carving out of the Material that which is ſuperfluous, whereby it comes to paſs that they produce out of whatſoever Maſs of *Marble*, the perfect Shape and Figure of a Man which was there hiddenly but potentially before; and thoſe that work this way, we call *Sculptors*: next of kin to whom are they that grave in *Seals* the Proportions of Faces, that be-

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fore lay hid in the Matter out of which they were raiſed. The third ſort is of thoſe that perform their Work by only adding to the Material; as *Silver-Smiths*, who beating the *Silver* with Mallets, and diſtending it into thin *Plates* of what Faſhion or Size they think fit, lay thereupon their *Superſtructure*, adding and inlarging till they have faſhion'd and brought to Perfection their intended *Deſign*. And here perhaps ſome may imagine, that in the number of this laſt ſort of Artiſts *Painters* are to be reckon'd, as thoſe who proceed by way of adding, namely by laying on of *Colours*; but to this they anſwer, that they do not ſtrive ſo much to imitate thoſe *Lights* and *Shadows* in Bodies which they diſcern by the Eye, by the adding or taking away of any thing, as by ſome other *Artifice* proper and peculiar to their way of Working: But of the *Painter* and his Art we ſhall take occaſion to ſpeak elſewhere. Now, as to thoſe ſeveral kinds of *Deſigners* which we have here before mention'd, though they go ſeveral ways to Work, nevertheleſs they all direct their Aims to this end, namely, that their Labours may appear to him that ſhall well obſerve them, as Natural, and as like the Life as may be; for the bringing of which to effect, it is moſt evident, that by how much the more exquiſitly they follow ſome certain determin'd Rule or Method (which *Rule* we ſhall afterwards deſcribe) ſo much the fewer *Defects* will they be guilty of, ſo much the fewer *Errors* commit, and in all manner of Accounts their Works will ſucceed and come off with the greater Advantage: What ſhall we ſay of *Carpenters*? What would they perform to any purpoſe, if it were not for the *Square*, the *Plummet*, the *Line*, the *Perpendicular*, and the *Compaſſes* for the making of *Circles*, and by the means of which Inſtruments they Deſign their *Angles*, their *Streight-Lines*, their *Levells*, and other their Proportions, thereby finiſhing and compleating all they take in hand with the greater exactneſs, and without which they would be able to do nothing ſubſtantially? Or can we rationally imagine, that the *Statuary* could perform ſuch excellent and admirable Works by chance, rather than by the help of ſome certain and Infallable *Rule* or *Guide*, drawn from *Reaſon* and *Experience*? Wherefore this we ſhall lay down for a *Maxim*; That from all *Arts* and *Sciences* whatſoever, there are drawn certain *Principles*, *Rules*, or natural *Concluſions*, which if we ſhall apply our ſelves with all care and diligence to examine and make uſe of, we ſhall undoubtedly find the benefit of, by the perfect accompliſhment of whatſoever we take in hand: For as we were firſt inſtructed by Nature, that from thoſe Lineaments which are found in pieces of Wood, Earth, Stone or other Materials, may be drawn (as we ſaid before) the forms of whatſoever Body or Creature the concourſes of theſe Lines reſemble; ſo alſo the ſame Nature hath taught us certain helps and means, by which we are guided to proceed ſecurely and regularly in what we undertake, and by the conſtant obſerving and uſe whereof, we ſhall moſt eaſily, and with the greateſt Advantage, arrive at the utmoſt perfection of the Art or Faculty we ſtrive to attain. It now remains that we declare what thoſe helps are which Statuaries are chiefly to make uſe of;

and

and beçauſe their principal Part is to make one Thing to imitate and reſemble another, it will be requiſite to ſpeak firſt of *Reſemblance*, a Subject our Diſcourſe might be abundantly ample in, ſince Reſemblance is a Thing ſo natural and obvious, that it offers it ſelf to our View and Obſervation in each viſible Object; not only every Animal, but even all Things whatſoever that are of the ſame Species, being in ſome reſpect or other correſpondent and alike: On the other Side, there are not in the whole Race of Mankind, any Two to be found ſo exquiſitely reſembling each other, as not to differ ſome one Tittle in the Tone of the Voice, or the Faſhion of the Noſe, or of ſome other Part; to which we may add, that thoſe Perſons whom, having firſt beheld Infants, we come to ſee Children of ſome Growth, and afterwards at the Age of Manhood, if at length we meet them when grown Old, we ſhall find them ſo chang'd and alter'd by Time, that we ſhall not be able to know them; for as much as the Aptitude and Poſition of thoſe numerous Lines and Features in the Countenance ſtill alters, and varies from Time to Time, as Age comes on; nevertheleſs in the ſame Viſage there remains a certain natural and peculiar Form, which maintains and keeps up the Reſemblance inherent to the Species: But we ſhall wave theſe Things, as belonging rather to a particular Diſcourſe, and return to purſue what we firſt took in hand to treat of.

The Deſign and Intention of making Reſemblances among *Statuaries*, I take to be Twofold; The Firſt is, that the Deſign or Work intended for the Reſemblance of any ſort of Creature (for example, ſuppoſe it a Man) be ſo fram'd, that it come as near in Similitude as may be to the ſaid Species, without regarding whether it repreſent the Image of *Socrates* more than that of *Plato*, or any other known individual Perſon, ſince it is enough, that the Work reſembles a Man in general. The other Intention proceeds farther, and aims not only at the repreſenting the Likeneſs of Man in general, but of this or that particular Man; as namely, of *Cæſar*, or *Cato*, not omitting to deſcribe the very Habit he wore, the Poſture he affected, and the Action he uſed; whether ſitting in his Tribunal, or making Speeches to the People: It being the proper Buſineſs of thoſe who addict themſelves to this laſt way of Repreſentation, to imitate and expreſs every Habit, Poſture and Air, peculiar to the Body of that known Perſon whom we intend to repreſent. Anſwerable to theſe two Intentions, (that we may handle the Matter as briefly as is poſſible) there are eſpecially required two Things; that is to ſay, Proportion, and Limitation. In treating therefore of theſe Two Particulars, that which we have to do, is to declare, Firſt, what they are: Next, to what Uſe they ſerve for the bringing of our Deſign to Perfection: Beſides which, I cannot but by the way, take Notice of the great Benefit that is to be made of them in reſpect of the wonderful and almoſt incredible Effects which they produce; inſomuch that whoſoever ſhall be well inſtructed in them, ſhall be able by the Help of ſome certain infallible Marks, exactly to obſerve and point out the Lineaments, Situation and Poſiture of the Parts of any Body, though it were a thouſand Years after, ſo as not to fail to place it exactly at his Pleaſure, in the very ſame Direction and Poſture it ſhould have happen'd to have ſtood in before; and in ſuch ſort, as there ſhould not be the leaſt part of the ſaid Body,

which ſhould not be reduced and reſituated toward the very ſame Point of *Heaven* againſt which it was originally directed: As if, for example, You would point out the Place with your Finger where the Star of *Mercury* or the new *Moon* would riſe, and it ſhould happen to riſe in a direct Angle over againſt the Point of the *Knee*, *Elbow*, *Finger*, or any other Part; moſt certain it is, that by theſe Means and Helps, all this may be done, and that ſo preciſely, that there ſhould not follow the leaſt Failing or Error imaginable; nor need there any Doubt be made of the Certainty hereof. Beſides this, ſuppoſe I ſhould take one of the Statues of *Phidias*, and ſo cover it over with *Wax* or *Earth*, that none of the Work could be diſcern'd, and that it ſhould appear to be only a meer ſhapeleſs Trunk, You might by theſe Rules and Helps certainly know how to find out in one Place, by boaring with a Wimble, the Pupil of the *Eye*, without doing it any harm by touching it; and in another Place the *Navel*, and finally in another the great *Toe*, and ſo other Parts in like manner; by which means you will gain a perfect Knowledge of all the Angles and Lines, whether far diſtant one from another, or nearly concurring together: You may alſo, beginning which way you will, and whether following the Original, or the Copy, not only *Draw* or *Paint*, but alſo put down in *Writing*, the various Courſe of the Lines; the Circumferences of the Circles, the Poſitions of the Parts, in ſuch Sort, that by the aforeſaid Helps and Means, you need not doubt the being able to produce with Eaſe, ſuch another Figure perfectly reſembling, and of what Size you pleaſe, either Leſs, or juſt of the ſame Magnitude, or of an hundred Fathoms in length; nay, I dare be bold to ſay, that were there but Inſtruments to be had, anſwerable to ſo great a Deſign, it were not only not impoſſible, but even no hard matter, to make one as big as the Montain *Caucaſus*; and that which perhaps you may moſt wonder at, is, that according as the Matter might be ordered, one half of this Statue may be made in the Iſland of *Pharos*, and the other Half wrought and finiſhed in the Mountains of *Carrara*; and that with ſuch exact Correſpondence, that the Jointures and Commiſſures of both Parts perfectly fitting each other, they may be united into one compleat Statue, reſembling either the Life, or the Copy after which it ſhall have been figur'd: And for the performing of this ſo ſtupendious a Work, the Manner and Method will appear ſo eaſy, ſo perſpicuous and expedite, that for my part, I conceive it almoſt impoſſible for any to err, but thoſe that ſhall induſtriouſly, to make tryal of the Proof of this Aſſertion, work contrary to the Rules and Method enjoyn'd. We do not hereby undertake to teach the Way of making all kind of Reſemblances in Bodies, or the expreſſing of all thoſe various Aſpects which reſult from ſeveral differing and contrary Paſſions and Affections; ſince it is not the Thing which we profeſs to ſhew, how to repreſent the Countenance of *Hercules* when he combats with *Antæus*, with all the height of Magnanimity and Fierceneſs which would be requiſite upon ſuch an Occaſion; or caſting an obliging, chearful and ſmiling Air, when he courts his *Deianira*; ſo as that the Countenance of the ſame *Hercules* ſhould upon ſeveral Occaſions be repreſented with as various Aſpects: But our Purpoſe is rather to take notice of all the different Figures and Poſtures that are incident to a Body from the divers Situations, Geſtures or Motions

of

of the ſeveral Members or Parts thereof; for as much as the Proportions and outward Lines are one way terminated in a Body that ſtands upright, another way in him that ſits, another way in one that is lying down, another way in thoſe that turn or incline themſelves toward this or that Side; and ſo in like manner, in all other Geſtures and Motions of the Body, of which way of Repreſentation our Intention is at this Time; that is to ſay, in what Manner, and by what certain and infallible Rules, theſe Geſtures and various Diſpoſitions of the Body may be imitated and repreſented; which Rules, as we ſaid before, are reduced to two Principal Heads, namely, *Proportion* and *Limitation:* And firſt we ſhall treat of *Proportion*, which is indeed no other than a conſtant and certain Obſervation, by examining the juſt Number and Meaſures, what Habitude, Symmetry and Correſpondence all the Parts of the Body have one towards another, and that in reſpect of every Dimenſion of the Body, both as to *Length*, *Breadth*, and *Thickneſs*.

This Obſervation is made by two ſorts of Inſtruments, a large Ruler, and two movable Squires; with the Ruler we take the Lengths of the Parts, and with the Squares we take their Diameters and all the other Proportions of the ſaid Meaſures. Upon this Ruler then let there be a Line drawn of the Length of the Body which you would meaſure, that is to ſay, from the Crown of the Head to the Sole of Foot: Whence note by the way, that to meaſure a Man of a ſhort Stature, you are to uſe a ſhorter Ruler, and for one of a longer Stature, a longer Ruler: But whatſoever the Length of the Ruler be, it is to be divided into ſix equal Parts, which Parts we will name Feet, from whence we will call it the Foot-meaſure; and each of theſe Feet ſhall again be divided into ten equal Parts, which we may term Inches.

The whole Length therefore of this Model or Foot-meaſure will conſiſt of 60 Inches; every one of which is again to be ſub-divided into 10 equal Parts, which leſſer Parts I call Minutes; ſo that thro' this Diviſion of our Meaſure into Feet, Inches, and Minutes, the Total of the Minutes will amount to the Number of 600, there being in each of the 6 Feet 100. Now, for the meaſuring of a Man's Body by this Inſtrument we are thus to proceed: Having divided our Ruler according to the foreſaid Manner, we are to meaſure and obſerve by the Application thereof, the Diſtances of the Parts of the ſaid Body; as for Inſtance, how high it may be from the Sole of the Foot to the Crown of the Head, or how far diſtant any one Member is from another: As, how many Inches and Minutes it may be from the Knee to the Navel, or to the Cannel Bone of the Throat, and ſo in like manner any other Parts; Nor is this Courſe to be at all ſlighted or derided either by *Sculptors* or *Painters*, ſince it is a Thing moſt profitable, and abſolutely neceſſary; for as much as the certain Meaſure of all the Parts being once known, we ſhall have gain'd a moſt eaſy and ſpeedy Determination how to proceed in our Work with any of the ſaid Parts or Members without committing the leaſt Error: Never think it a Matter worth Regard or Notice, if any capricious Humouriſt ſhall peradventure find fault that this Member is too long, or that too ſhort; ſince your Model or Footmeaſure (which is the Rule that muſt always direct and govern your Work, and than which you cannot go by a more infallible Guide) will ſoon determine whether you have proceeded well or ill; and doubtleſs when you ſhall have

maturely

maturely conſidered and examined theſe Things, you will not be to ſeek in thoſe infinite other Advantages wherein this Foot-meaſure will prove ſerviceable, eſpecially in knowing how with abſolute Certainty to limit and determine the Longitude of the Parts in a Statue of a greater Magnitude, as well as in one of a Leſſer.

So as if it ſhould happen that you were to make a Statue of 10 Cubits, or whatever other Dimenſion, it would be requiſite to have your Ruler, Model, or Foot-meaſure likewiſe of 10 Cubits, and divided into ſix equal Parts, which ſhould have the ſame Correſpondence one with another, as thoſe of the leſſer Ruler: In like manner, ſhould the Inches and Minutes be proportioned, whence alſo the uſe and manner of working would be the ſame with the other; ſince half the Numbers of the Greater have the ſame Proportion to the whole intire, as half the Numbers of the Leſſer have to the whole intire of the Leſſer. Wherefore according as the Size of your Work happens to fall out, your Ruler is to be made proportionably.

We come next to treat of the Squares, which are to be two; the firſt of which ſhall be made after this manner: Let two Rulers in the nature of ſtreight Lines, *i. e.* A. B. and B. C. be join'd together ſo as to make a right Angle; the firſt Ruler A. B. falling perpendicular, the other B. C. ſerving for the Baſe: The Bigneſs of theſe Squares is to be ſo ordered, that their Baſes conſiſt of at leaſt 15 Inches, according to the Proportion of your main Ruler, which, as we have ſaid before, is to be made bigger, or leſſer, anſwerable to the Proportion of the Body you would meaſure: Theſe Inches therefore with their Points and Minutes (however they may fall out) being taken exactly from the ſaid Ruler, you muſt ſet down upon your Baſe, beginning to reckon from the Point of the Angle B. and ſo proceeding on towards C.

The Square being thus marked and divided, as is to be ſeen in the Example A. B. C. there is to be adjoined unto it another Square made after the ſame manner, according as it is demonſtrated by the Letters D. F. G. ſo as that G. F. may ſerve both for ſtraight Line and Baſe to both. Now to ſhew the Uſe of theſe Inſtruments, I undertake to meaſure the Diameter of the thickeſt part of the Head H. I. K. by bringing the two ſtraight Rulers A. B. and D. F. of each Square exactly oppoſite to each other, to touch the two oppoſite Points of the thickeſt Part of the Head, and by applying interchangeably to one and the ſame Level, the Baſe-lines of the ſaid Squares; by which means from the Points H. I. which are touch'd by the ſtreight Rulers of the ſaid Squares, we ſhall diſcover the exact Diameter of the Head.

And

And after this manner, the Thickneſs and Bigneſs of any Part of the Body whatſoever may with great Eaſe and Accurateneſs be found out: Many Uſes and Advantages we could reckon up, which might be made of this Ruler and theſe Squares, were it needful to inſiſt now upon them; there being ſeveral other Ways, much after the ſame manner, which the meaneſt Capacity may of himſelf find out, for the meaſuring of the Diameter of any Part; as for example, ſuppoſe one would know how much the Diameter is from one Ear to the other, and whereabouts it interſects the other Diameter which paſſes from the Head to the *Nuca*, or the like. Laſtly, our Workman may ſafely make uſe of this Ruler and theſe Squares as moſt faithful Guides and Counſellors, not only for the performing of any part of his Work, but alſo at the very firſt, and before he ſets upon it, he will receive much Light by the help of theſe Inſtruments, how to begin and go about it; inſomuch, that there will not be the leaſt part of the Statue he is to make, which he will not before have examin'd and conſider'd and render'd moſt eaſy and familiar to him. For Example, Who but a very arrogant Perſon would take upon him to be a Maſter-ſhip-wright that had not the perfect Knowledge of all the ſeveral parts of a Ship, and how one kind of Ship differs from another, and what thoſe particular Parts are which belong to one Ship more than to another? And yet who is there of our Sculptors, let him be a Man never ſo ſubtile and experienc'd in his Art, who if it ſhould be demanded of him, upon what Ground or Conſideration he has made this Member after this manner, or what may be the Proportion of this or that Member to the whole Structure of the Body? I ſay, who is there ſo diligent and accurate as to have well conſider'd and obſerv'd all that is requiſite, and which becomes that Perſon to know who would perform as he ſhould do the Art whereof he makes Profeſſion? whereas doubtleſly all Arts and Faculties are moſt advantageouſly learn'd by Rule and Method, and by the Knowledge of ſome demonſtrable Operation that is to be perform'd; nor ſhall any one attain to the Perfection of any Art whatſoever, who hath not firſt comprehended every ſeveral Part and Branch of the ſaid Art. But thus having ſufficiently treated of *Meaſure* and *Proportion*,

tion, and after what manner it is to be found out by the Ruler and Squares; it remains that we ſpeak next of *Limitation*, or the preſcribing of *Bounds*: This Preſcription of *Limits* is the determining or fixing of a certain Period in the drawing of all our Lines, ſo as to direct to what Point they are to be continued, whether extended out in Length, or revers'd; how Angles are to be fix'd, how Parts are to be rais'd, or depreſs'd by *Alto, or Baſſo Relievo*, as Artiſts term it; each *Line*, *Angle* and *Relieve* having their due and certain Places aſſign'd them by the Conduct of a ſure and perfect Rule: And the beſt way to put this rule of *Limitation* in practice, will be by a Line and Plummet, falling from a certain determinate Center plac'd in the Middle, whereby the Diſtances and Extremities of all the Lines may be mark'd out and taken notice of, as far as the utmoſt Bounds every way of the ſaid Body extends: But between the Meaſure deſcrib'd above, and this Aſſignation of *Limits*, there is this difference, namely, that that Meaſure looks farther backward, and ſprings from a more native and original Conſideration, as grounded upon more common and univerſal Principles, which are by Nature more firmly and ſubſtantially inherent in all Bodies; as the *Length*, *Largeneſs* and *Thickneſs* of the Parts; whereas the preſcribing of *Bounds* is grounded upon the preſent and accidental variety of Poſtures, reſulting from the different Diſpoſitions and Motions of the ſeveral Parts of the Body, ſhewing the manner how to limit and faſhion thoſe Poſtures, according to the *Maxims* of Rule and Art.

Now, for the better performance of this laſt part of Regular Operation, we ſhall recommend this following Inſtrument, which is to conſiſt of three Parts or Branches; that is to ſay, an *Horizon*, a *Style*, and a *Plumb*: The *Horizon* is a *Plane* deſign'd upon a Circle, which Circle is to be divided into equal Parts mark'd with their ſeveral Members, and their Subdiviſions ſet over againſt each Part: The Style is a ſtreight Ruler, one end whereof is fix'd in the Center of the ſaid Circle, the other End moves about at Pleaſure, ſo as that it may be eaſily transferr'd and directed from one Diviſion of the Circle to another: The *Plumb* or *Plummet* is a Line or Thread which falls parallel from the Top of the *Style* down to the Floor or Plane, upon which the Statue or Figure ſtands whoſe Members and Lineatures are to be meaſur'd and limited: For the manner of making this Inſtrument, let it be thus; Take a Board well plain'd and ſmooth'd, upon which let a Circle be drawn, having three Foot diameter, and let the Extremity of the ſaid Circle's Circumference be divided into equal Parts, according as *Aſtrologers* divide their *Aſtrolabes*, which Parts we will call Degrees; and let every of theſe Degrees be ſubdivided again into as many other Parts as ſhall be thought fit; as for example, ſuppoſe every Degree be ſubdivided into ſix leſſer Parts, which we may call Minutes; to all which Degrees adjoin the ſeveral Numbers, *viz.* 1. 2. 3. 4. with the reſt in order, till the Numbers belonging to all the Degrees be ſet down. This Circle, thus made and order'd, we call'd the *Horizon*, to which we are to fit our moveable *Style*, being alſo to be made after this manner; Take a thin ſtrait Ruler, three Foot in Length, and faſten one of the Ends thereof (with a Pegg) to the Center of its *Horizon* or Circle, in ſuch a manner, that tho' the ſaid End is not to be mov'd from the Center, yet the Pegg that faſtens it is ſo far to be relax'd, that the whole Ruler may have liberty to move and play about from one part of the Circle to another, whilſt the other

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Extream extends it ſelf a good way beyond the Circumference of the ſaid Circle about which it is to be mov'd: Upon this Ruler or *Style*, mark out the Inches it is to contain, diſtinguiſhing them with ſeveral Points between, after the manner of the Module or Foot-meaſure above-mention'd; and theſe Inches muſt alſo be ſubdivided into leſſer equal Parts, as was likewiſe done in the foreſaid Foot-meaſure; and then beginning from the Center, adjoin to the Inches alſo their ſeveral Numbers, *viz.* 1. 2. 3. 4, *&c.* Laſtly, to this *Style* annex a Line and *Plummet*. This whole Inſtrument thus deſcrib'd conſiſting of *Horizon*, *Ruler*, and *Plummet* we ſhall call our *Definitor*.

This *Definitor* is to be made uſe of in this manner: Suppoſe the *Original*, or *Copy*, the Limits of whoſe Parts we would determine, were a Statue of *Phidias*, holding with the left Hand, on one Side of a *Chariot*, the Raines of a Horſe's Bridle: This *Definitor* is to be ſet upon the Head of the Statue in ſuch Sort, that it may lie exactly level upon the Plane of the Center, being plac'd juſt upon the very midſt of the Head of the Statue, where it is to be made faſt with a Pegg: Then note that Point where it is faſtned upon the Head of the Statue, and mark it by ſetting up a Needle or Pin for the Center of the Circle: Next, by turning the Inſtrument about from the determin'd Place in the *Horizon*, make out the firſt deſigned Degree, ſo as you may know from whence it is mov'd; which may beſt be done after this following manner: Bring about the moveable Ruler, which is the *Style*, upon which the Thread and *Plummet* hangs, 'till it arrive at that Place of the *Horizon* where the firſt degree of the *Horizon* is to be ſet down; and holding it faſt there, turn it about together with the whole Circle thereof, until the Line of the *Plummet* touch ſome principal Part of the Statue, that is to ſay, ſome Member particularly noted above all the reſt, as the Finger of the right Hand or ſo.

Which may ſerve as the appointed Place from whence upon every new occaſion the whole *Definitor* may be mov'd, and afterwards brought back again to the ſame Place where it ſtood at firſt upon the ſaid Statue; yet ſo. that by the turning of the *Style* about the Pin, which pierceth from the top of the Head of the Statue, through the Center of the *Definitor*, the *Plummet* which before fell from the firſt degree of the *Horizon*, may return to touch the foreſaid Finger of the right Hand. Theſe Things thus order'd and deſign'd, ſuppoſe that we would take the Angle of the right Elbow, ſo as to keep the Knowledge of it in mind, or to write it down; the Way is as followeth: Fix the *Definitor* with its Center which is upon Head of the Statue, in the Place and Manner aforeſaid, in ſuch Sort, that the Plane whereon the *Horizon* is deſign'd, may ſtand firm and immoveable; then turn about the moveable *Style*, till the Line of the *Plummet* come to touch the left Elbow of the Statue which we would meaſure: But in the peforming of this ſort of Operation there are three Things to be obſerv'd, which will much conduce to our Purpoſe: The Firſt is, That we mark how far the *Style* in the *Horizon* comes to be diſtant from the Place where it ſhall have been firſt moved, taking notice upon what degree of the *Horizon* the *Style* lies, whether on the Twentieth, Thirtieth or whatſoever other: Secondly, obſerve by the Inches, and Minutes mark'd in the *Style*, how far diſtant the Elbow ſhall be from the Center of the Circle: Laſtly, take notice by placing the Module or Foot-meaſure perpendicularly upon the Plane whereon the Statue ſtands, how many Inches and Minutes the ſaid Elbow is raiſed above the ſaid Plane, and write down theſe Meaſures in a Book or piece of Paper: For Example, thus, the Angle of the left Elbow is found in the *Horizon* to be 10 Degrees and 5 Minutes; in the *Style* or Ruler 7 Degrees and 3 Minutes; that of the Plane in the Module amounts to 40 Degrees and 4 Minutes; and thus by the ſame Rule may be meaſured and computed all the reſt of the principal Parts of the ſaid Statue or Copy; as for inſtance: The Angles of the Knees, and of the Shoulders and other ſuch like Parts that are to be reckoned among the *Relievi:* But if you would meaſure Concavities, or thoſe Parts which recede inward, and are ſo removed out of the reach of Sight and eaſy Acceſs, that the *Plummet*-line cannot come to touch them (as it happens in the Concavities beneath the Shoulders, in the Regions of the Reins, *&c.*) the beſt way to find them is as follows: Add to the *Style* or Ruler another *Plummet*-line which may reach as far as the ſaid Concavity; how far diſtant it be from the firſt, it is not material, ſince by theſe two *Plummet*-lines falling perpendicularly, and being interſected by the *Gnomon* of the plain Superficies above to which they are faſtned, and which extends itſelf as far as the Center of the Statue, it will appear how much the ſecond *Plummet*-line is nearer than the firſt to the Center of the *Definitor*, which is therefore called the middle Perpendicular.

Theſe Things thus demonſtrated, being once ſufficiently underſtood, it will be an eaſy matter to comprehend what we before commended to your Obſervation; namely, that if the ſaid Statue ſhould chance to have been cover'd over to a certain Thickneſs with *Wax* or *Earth*, you might yet by a Piercer, with great eaſe, readineſs, and Certainty come to find out whatſoever Point or Term you would deſire to find in the ſaid Statue; for as much as it may be clearly demonſtrated, that by the turning about of this *Gnomon*,

Gnomon, the Level makes a circular Line like the Superficies of a *Cylinder*, with which fort of Figure the Statue ſo ſuperinduc'd as aforeſaid, ſeems to be incloſed and incircled: This Poſition eſtabliſhed, you may ſafely infer, that as by making way through the Air (the Statue not being covered with *Wax* or *Earth*) you guide your Piercer directly towards the Point T. (which for Example's ſake we will ſuppoſe to be the *Relievo* of the Chin) by the ſame Reaſon, if the Statue were cover'd over with *Wax* or *Earth*, might you by boaring through the ſaid *Wax* or *Earth* attain the Point aim'd at, the *Wax* or *Earth* poſſeſſing but the ſame Place which otherwiſe the Air would have done: From what hath been thus diſcours'd concerning theſe Things, it may be concluded that the Effect we mention'd before concerning the making of one half of the Statue in the Iſle of *Pharos*, and finiſhing the other half in the Mountains of *Carrara*, is a Thing not only not impoſſible, but very eaſy to be perform'd; For let the ſaid Statue or Model of *Phidias* be divided into two Segments, and ſuppoſe, for example, this Section of a plain Superficies be made in the Waſt or Girdling Place, doubtleſs by the only aſſiſtance of our *Definitor* it will be eaſy to mark out in the Circle of the Inſtrument whatſoever Points ſhall be thought fit, belonging to the divided Superficies: Theſe Things granted to be feaſible, you ſhall not need to make any Queſtion of being able to find out at pleaſure in the Model, any part whatſoever you ſhall deſire to find; and that only by drawing a ſmall Red Line in the Model, which ſerves inſtead of an interſection of the *Horizon*, in the Place where this Segment ſhould terminate, if the Statue were divided; and the Points ſo mark'd will direct you the way how the Work may be finiſhed: And in like manner may other Things be done, as hath been ſaid before. Finally, by the whole Diſcourſe here made concerning all theſe Particulars, it is ſufficiently evident, that all Meaſures, Proportions and Limitations are to be taken, whether in the Life, or Copy, by a moſt certain and infallible Rule for the bringing of any Work to perfection in this Art; and we could wiſh that this way of proceeding were more ſeriouſly intended by all our *Painters* and *Sculptors*, ſince, if it were, they would ſoon come to find the extraordinary Benefit of it: But becauſe all Things are moſt illuſtrated by example, and that the Pains we have already taken in this Matter may conduce to the greater Advantage; we have thought fit to beſtow yet a little farther Labour in deſcribing the Meaſures of all the principal Parts in Man's Body; and not only the Parts of this or that particular Man, but as far as was poſſible, even the very Perfection of all beautiful and excellent Proportions; the ſeveral Parts whereof having obſerved in ſeveral humane Bodies, ſome excelling chiefly in this, ſome in that external Gift of Nature, we have thought material to ſet down in writing; following the Example of him, who being employed by the *Crotoniati* to make the Statue of their *Goddeſs*, went about collecting from the moſt beautiful Virgins (whom among many, he with great diligence ſearch'd out) thoſe Proportions and handſome Features wherein each of them principally excell'd, and apply'd them to his own Statue. Since much after the ſame manner we, having taken

the Draught from thoſe Bodies, that of divers others were judg'd, by the moſt Sagacious in this Inquiry, to be the moſt exactly built and compos'd, with all their ſeveral Meaſures and Proportions; and comparing them exactly together, to obſerve wherein they excell'd, or were excell'd each by the other, have made choice out of this variety of Models and Examples, of thoſe middle Proportions which ſeem'd to us moſt agreeable, and which we have here ſet down by the Lengths, Bigneſſes and Thickneſſes of all the principal and moſt noted Parts; and in the firſt place the Lengths are theſe following.

The Heights from the Ground.	*Feet.*	*Deg.*	*Min.*
The greateſt Height from the Ground to the Inſtup of the Foot	0	3	0
The Height up to the Ankle-bone on the outſide of the Leg.	0	2	2
The Height up to the Ankle-bone on the inſide of the Leg.	0	3	1
The Height up to the Receſs which is under the Calf of the Leg.	0	8	5
The Height up to the Receſs which is under the *Relievo* of the Knee-bone within.	1	4	3
The Height up to the Muſcle on the outſide of the Knee.	1	7	0
The Height up to the Buttocks and Teſticles.	2	6	9
The Height up to the *Os Sacrum*.	3	0	0
The Height up to the Joint of the Hips.	3	1	1
The Height up to the Navel.	3	6	0
The Height up the Waſt.	3	7	9
The Height up to the Teats and Blade-bone of the Stomach.	4	3	5
The Height up to that part of the Throat where the Weezle-Pipe beginneth.	5	0	0
The Height up to the Knot of the Neck where the Head is ſet on.	5	1	0
The Height up to the Chin.	5	2	0
The Height up to the Ear.	5	5	0
The Height up to the Roots of the Hairs in the Forehead.	5	9	0
The Height up to the middle Finger of a Hand that hangs down.	2	3	0
The Height up to the joint of the Wriſt of the ſaid Hand.	3	0	0
The Height up to the joint of the Elbow of the ſaid Hand.	3	8	5
The Height up to the higheſt Angle of the Shoulder.	5	1	8

The Amplitude or Largeneſſes of the Parts are meaſured from the Right Hand to the Left.

The greateſt Breadth of the Foot.	0	4	2
The greateſt Breadth of the Heel.	0	2	3
The Breadth of the fulleſt Part beneath the Jettings out of the Ankle-bones.	0	2	4
The Receſs or Falling-in above the Ankles.	0	1	5
The Receſs of the Mid-leg under the Muſcle or Calf.	0	2	5
The greateſt Thickneſs of the Calf.	0	3	5
The Falling-in under the *Relievo* of the Knee-bone.	0	3	5

The

	Feet.	Deg.	Min.
The greateſt Breadth of the Knee-bone.	0	4	0
The Falling-in of the Thigh above the Knee.	0	3	5
The Breadth of the middle or biggeſt Part of the Thigh.	0	5	5
The greateſt Breadth among the Muſcles of the Joint of the Thigh.	1	1	1
The greateſt Breadth between the two Flanks above the Joints of the Thigh.	0	0	0
The Breadth of the largeſt Part of the Breaſt beneath the Armpits.	1	1	5
The Breadth of the largeſt Part between the Shoulders.	1	5	0
The Breadth of the Neck.	0	0	0
The Breadth between the Cheeks.	0	4	8
The Breadth of the Palm of the Hand.	0	0	0

The Breadth and Thickneſs of the Arms, differ according to the ſeveral Motions thereof, but the moſt common are theſe following.

The Breadth of the Arm at the Wriſt.	0	2	3
The Breadth of the brawny part of the Arm under the Elbow.	0	3	2
The Breadth of the brawny Part of the Arm above, between the Elbow and the Shoulder.	0	4	0

The Thickneſs from the Fore-parts to the Hinder-parts.

The Length from the great Toe to the Heel.	1	0	0
The Thickneſs from the Inſtup to the Angle or Corner of the Heel	0	4	3
The Falling-in of the Inſtup,	0	3	0
From the Falling-in under the Calf to the Middle of the Shin.	0	3	6
The Outſide of the Calf of the Leg.	0	4	0
The Outſide of the Pan of the Knee.	0	4	0
The Thickneſs of the biggeſt part of the Thigh.	0	6	0
From the Genitals to the higheſt riſing of the Buttocks.	0	7	5
From the Navel to the Reins.	0	7	0
The Thickneſs of the Waſt.	0	6	6
From the Teats to the higheſt Riſing of the Reins of the Back.	0	7	5
From the Weezlepipe to the Knot or Jointure of the Neck.	0	4	0
From the Forehead to the hinder part of the Head.	0	6	4
From the Forehead to the Hole of the Ear.	0	0	0
The Thickneſs of the Arm at the Wriſt of the Hand.	0	0	0
The Thickneſs of the Brawn of the Arm under the Elbow.	0	0	0
The Thickneſs of the Brawn of the Arm between the Elbow and the Shoulder.	0	0	0
The greateſt Thickneſs of the Hand.	0	0	0
The Thickneſs of the Shoulders.	0	3	4

By means of theſe Meaſures it may eaſily be computed what Proportions all the Parts and Members of the Body have one by one to the whole Length of the Body; and what Agreement and Symmetry they have among themſelves, as alſo how they vary or differ one from another; which Things we certainly conclude moſt profitable and fit to be known: Nor were it from the Purpoſe to particularize how the Parts vary and alter, according to the ſeveral Geſtures incident to humane Bodies, as, whether they be ſitting, or inclining to this, or that Side: But we ſhall leave the more curious Diſquiſition into theſe Things, to the Diligence and Induſtry of our *Artiſt*. It would alſo be of very much conducement, to be well informed of the Number of the Bones, the Muſcles, and Riſings of the Nerves; and eſpecially to know how, by certain Rules, to take the Circumferences of particular Diviſions of Bodies, ſeparately conſidered from the reſt, by an Inſpection into thoſe Parts which are not outwardly expos'd to Sight: In like manner as if a Cylinder ſhould be cut down right through the Middle, ſo as out of that part of the Cylinder which is viſible throughout, there ſhould be ſeparated, by a circular Section through the whole Length of the Figure, an inward conſimilar Part which was before unſeen, ſo as to make of the ſame Cylinder two Bodies, whoſe Baſes ſhould be alike, and of the ſame Form, as being indeed wholly compriz'd within the ſame Lines and Circles throughout: By the Obſervation of which Sort of Section is to be underſtood the Manner of Separation of the Parts and Bodies before intimated; for as much as the Deſign of the Line by which the Figure is terminated, and by which the viſible Superficies is to be ſeparated from that which lies hid from the Sight, is to be drawn juſt in the ſame manner; and this Deſign being delineated on a Wall, would repreſent ſuch a Figure as would be much like a Shadow projected thereupon from ſome interpoſing Light, and which ſhould Illuminate it from the ſame Point of the *Ayr*, where at firſt the Beholder's Eye was placed: But this kind of Diviſion or Separation, and the way of deſigning Things after this manner, belongs more properly to the *Painter* than the *Sculptor*, and in that Capacity we ſhall treat of them more largely elſewhere. Moreover, it is of main Concernment to whatſoever Perſon would be eminent in this Art, to know how far each *Relievo* or Recels of any Member whatſoever is diſtant from ſome determined Poſition of Lines.

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